

Date on Transmittal Sheet

#32/ Submission
Final Judgment
+ Reports

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Reissue Application of:

BILL L. DAVIS and JESSE S. WILLIAMSON

1-30-01
L. Spruell

For Reissue of U. S. Patent 5,630,363

Issued May 20, 1997

Serial No. 08/515,097

Group Art Unit: 2854

Filing Date: May 20, 1999

Examiner: S. Funk
J. Hiltner

Serial No.: 09/315,796

For: **COMBINED LITHOGRAPHIC/
FLEXOGRAPHIC PRINTING
APPARATUS AND PROCESS**

**SUBMISSION OF FINAL JUDGMENT ON
CONSENT ENTERED IN CONCURRENT LITIGATION**

To: The Honorable Commissioner of
Patents and Trademarks
Washington, D.C. 20231

Sir:

Enclosed is a copy of the Final Judgment On Consent entered in the Northern District of Texas on January 23, 2001. The parties agreed, and the Court so ordered, adjudged and decreed, that on June 12, 1994 Davis and Williamson made certain disclosures concerning the Davis and Williamson invention to PRI's Baker, that Baker told PRI product manager and Serial No. 08/435,798 Co-applicant Bird of the information received from Davis and Williamson, and further that pursuant to a subsequent request on July 7, 1994, PRI's Rendleman prepared drawings of a ferris wheel device for the invention of Davis and Williamson.

Litigation Plaintiffs/PTO Protestors have conceded the alleged inventorship and state claims issues in the litigation, Davis and Williamson's priority to the '363 claimed subject matter, and the claimed subject matter of this reissue proceeding, and the validity and enforceability of the '363 claims.

Litigation Plaintiffs and Protestors have also admitted they know of no additional material prior art and other information that beyond what reissue applicants have already submitted to the PTO. See Counsel's letter of January 23, 2001 to the undersigned attached.

[Signature]

Reg. No. 27,877

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ATTORNEY FOR REISSUE APPLICANTS

TABLE 1		TABLE 2		TABLE 3	
Properties of the polymers		Properties of the polymers		Properties of the polymers	
Polymer	Properties	Polymer	Properties	Polymer	Properties
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[illegible]

BILL L. DAVIS and JESSE S. WILLIAMSON

Serial No. 08/515,097

Group Art Unit: 2854

Examiner: S. Funk
J. Hilten

For: **COMBINED LITHOGRAPHIC/
FLEXOGRAPHIC PRINTING
APPARATUS AND PROCESS**

I hereby certify that the following documents were served on Plaintiffs' counsel by delivering a true and correct copy thereof to the offices of Plaintiffs' counsel by depositing in first class mail on the 24th day of January, 2001, addressed as follows:

William D. Harris, Jr.
LOCKE LIDDELL & SAPP, LLP
2200 Ross Ave., Suite 2200
Dallas, Texas 75201

1. Submission of Final Judgment on Consent Entered in Concurrent Litigation

Part 2
Robert Hardy Falk

01/23/01 TUE 16:00 [TX/RX NO 8709]

6. Defendant Jesse S. Williamson ("Williamson") is an individual who resides in Dallas, Texas.

7. For the purpose of this action, this Court has personal jurisdiction of PRI, DeMoore, Rendleman, WPC, Davis and Williamson.

8. This Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1338 and 1367.

9. WPC is the owner of United States Patent No. 5,630,363 ("the '363 patent"). On May 20, 1999, WPC filed application serial number 09/315,796 in the United States Patent and Trademark Office ("PTO") to reissue the '363 patent ("the Reissue Application"), which is presently pending in the PTO.

10. The uncontroverted evidence in the record shows that, in June of 1992, Davis and Williamson conceived the invention described and claimed in the '363 patent.

11. The evidence in the record further shows that, on June 12, 1994, Davis and Williamson disclosed the invention of the '363 patent to Steve Baker ("Baker"), a salesman of PRI, telling him that they wanted to apply inks or coatings using the flexographic process upstream of or prior to printing with lithography in a continuous in-line process on an offset lithographic press and that they wanted to use a retractable, interstation printer/coater having an anilox roller and chambered doctor to perform the flexographic process, and that on June 15, 1994, Baker told John W. Bird ("Bird"), product manager of PRI, the information that Davis and Williamson had disclosed to Baker on June 12, 1994.

12. WPC entered into an agreement with PRI to provide to WPC a retractable, interstation flexographic printer/coater with an anilox roller and a chambered doctor.

13. Pursuant to DeMoore's request on July 7, 1994, Rendleman, who was employed by PRI, prepared drawings of the ferris wheel, retractable flexographic printer/coater shown in Figure 2 of the '363 patent. The ferris wheel, retractable flexographic printer/coaters

manufactured and delivered to WPC by PRI were paid for by WPC pursuant to the agreement between WPC and PRI.

14. On May 4, 1995, DeMoore, Rendleman and Bird filed U. S. patent application serial number 08/435,798 ("the '798 application"). The overlapping process disclosure common to the '798 application and the '363 patent and the Reissue Application originated from Davis and Williamson. The subject matter of unprosecuted method claims 24-35 of the '798 application, and narrower claims thereof, do not conflict with the '363 patent and the Reissue Application. Davis, Williamson and WPC do not claim inventorship of the claimed subject matter of claims 1-23 of the '798 application pending (allowed or on appeal) as of December 1, 2000, and the unprosecuted claims 24-35 of the '798 application, and any claims of U.S. Patents No. 5,598,777, No. 5,631,316, No. 5,960,713, and No. 6,116,158.

15. Plaintiffs no longer contend that they, individually, collectively or in any combination, is or are a sole or joint inventor of any claim of the '363 patent as issued or any of claims 1-87 of the Reissue Application pending as of December 1, 2000.

16. With respect to all claims of the '363 patent as issued and claims 1-87 of the Reissue Application pending as of December 1, 2000, priority rests in the inventive entity of Davis and Williamson and not in any entity consisting of one or more of DeMoore, Rendleman and Bird.

17. There was no fraud or inequitable conduct in the prosecution of the application that resulted in issuance of the '363 patent.

18. Based on the evidence in the record in this action, the information presently known to the parties, and the prior art and other information of record in the Reissue Application, all claims of the '363 patent as issued, and claims 1-87 of the Reissue Application, are valid, including being valid under the provisions of 35 U.S.C. §§ 102 (a), (b), (c), (e), (f) and (g) and 103.

19. Apart from the specific findings set forth herein, all claims and counterclaims of the parties in this action are hereby dismissed with prejudice.

20. The parties waive all right to appeal from this judgment.

21. Each party shall pay its own attorney's fees and costs.

22. This Court shall retain jurisdiction to enforce this judgment and the settlement agreement entered into by the parties with respect to this action.

SO ORDERED on this 22 day of January, 2001


BARBARA M.G. LYNN
UNITED STATES DISTRICT JUDGE

APPROVED AND AGREED TO
AS TO FORM AND CONTENT:

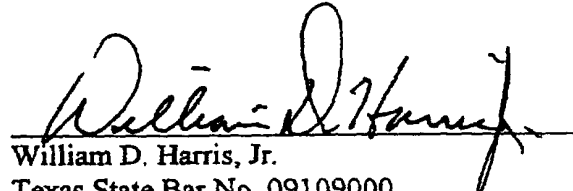
PRINTING RESEARCH, INC.

By: 

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Its: President

 1/16/01
HOWARD W. DEMORE


RONALD M. RENDLEMAN


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Jesse S. Williamson
Its: President

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January 25, 2001

VIA FEDERAL EXPRESS

Examiner Stephen Funk
United States Patent and Trademark
Office Group 2854
Room 9D35 - Crystal Plaza IV
Arlington, VA 22202

Re: Reissue Application Serial No. 09/315,796 to Davis and Williamson
Our File: WILL 2501

Dear Mr. Funk:

Enclosed are the original of two papers for filing:

- 1) SUBMISSION OF FINAL JUDGMENT ON CONSENT ENTERED
IN CONCURRENT LITIGATION; and
- 2) SUBMISSION OF EXPERT REPORTS IN CONCURRENT
LITIGATION.

I am working hard on the other papers so that they can be transmitted to you directly this week.

Respectfully submitted,


Robert Hardy Falk

RHF:lc
Enclosures

cc: John P. Pinkerton, Esq.

[illegible]

BILL L. DAVIS and JESSE S. WILLIAMSON

Serial No. 08/515,097

Group Art Unit: 2854

Examiner: S. Funk
J. Hilten

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- (3) Edward G. Fiorito, Patent Expert  
6925 Spanky Branch Drive  
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Undated Report Submitted: November 17, 2000 (**Strawberry Tab 3**)
- (4) Lar Manke, [Alleged] German Patent Expert  
Amalienstrasse 40  
80199 Munich  
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Report Submitted: November 17, 2000 (**Red Tab 4**)

For Defendants Williamson Printing Corporation, Bill L. Davis and Jesse S. Williamson:

- (1) Bernarr R. Pravel, Esq., Patent Expert  
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711 Louisiana Street, South Tower, Suite 1900  
Houston, Texas 77002  
First Report Dated: October 5, 2000 (**Light Purple Tab 5**)
- (2) Raymond J. Prince, Technical Expert  
Senior Technical Consultant, Technical Services Group  
Graphic Arts Technical Foundation (GATF)  
200 Deer Run Road  
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Report Dated: November 15, 2000 (**Purple Tab 6**)
- (3) James E. Taylor, Technical Expert  
4129 Drowsey Lane  
Dallas, Texas 75233  
Report Dated: November 15, 2000 (**Blue Tab 7**)
- (4) Bernarr R. Pravel, Esq., Patent Expert  
Akin, Gump, Strauss, Hauer & Feld, LLP  
711 Louisiana Street, South Tower, Suite 1900  
Houston, Texas 77002  
Second Report Dated: November 16, 2000 (**Aquamarine Tab 8**)

#### **THE EXPERTS' POSITIONS**

##### **I. Plaintiffs' Position**

Plaintiffs' experts' reports were received from Mott (**Yellow Orange Tab 1**), Fiorito (**Strawberry Tab 3**), and Manke (**Red Tab 4**). No formal report was received from Kice (**Orange Tab 2**).

Professor Mott, in a 4½ page report, opined that the May 4, 1995 PRI application [Serial No. 08/435,798] was enabling (Report at pp. 3,4):

"In my opinion, the disclosure in the May 4, 1995 Patent Application by Printing Research Inc., would enable an experienced, educated person in the commercial printing industry to understand the nature of the device, how it is mounted on an offset lithographic press and the manner in which the device is utilized for printing. It would certainly teach the process of printing in-line in a single pass of flexography followed by one or more lithographic steps.

"I am of the opinion that the language and teaching in Patent Application filed May 4, 1995 is quite sufficient to teach one of ordinary skill in the art how to practice the invention ultimately described in the '363 patent. This is based on a review of the May 4, 1995 application and the '363 patent. Moreover, I also believe that the May 4, 1995 application likewise teaches how to practice the concepts developed by DeMoore and Rendleman that are described above in the preceding paragraph."

Mott also alluded to purported summer 1994 discussions between DeMoore and Ronald Rendleman, but referred to no original PRI document, deposition testimony or witness statements to back up his assertion of a PRI-based conception prior to May 4, 1995:

"I was asked to consider when and what constituted a sufficient mental formulation by the inventor(s) of a complete idea for a product or process in the present matter. I was to consider that the idea must be of specific means, not just a desirable end or result, that must be sufficiently complete so as to enable anyone of ordinary skill in the art to reduce the concept to practice. In the context of on-line upstream single pass flexographic printing followed by lithographic printing, the ferris wheel coater (Rendleman coater) mounted upstream in combination with a multi-station press accomplishes this. The summer of 1994 discussions between Howard DeMoore and Ronald Rendleman, followed by the sketches of the winter of 1994, and particularly of December 30, 1994 by Rendleman meet the foregoing requirements.

"In a broader sense, the summer disclosure of Mr. DeMoore and Mr. Rendleman by which his thinking or concept was disclosed by his inquiry to Mr. Rendleman of whether he could place a coater interstage discloses the recognition by Mr. DeMoore of the desirability of having a convertible (from lithographic) flexographic step or station upstream of lithographic stations. This convertible concept contrasts with a dedicated flexographic station to provide the upstream flexographic step. When the ferris wheel type coater is used the concept involves the use of a convertible flexo/litho station. *I have not yet formulated an opinion as to whether the disclosure involving only generally flexo before litho (single pass) constitutes a sufficiently complete idea to teach one how to practice or perform but I expect to supplement this report if I do. I do believe that this is a broad idea that may be short of a concrete concept.* The addition of a convertible printing station with a Rendleman coater provides a specific means to accomplish the desired result." (Emphasis supplied.)

Mott, therefore, does not conclude that DeMoore-Rendleman had a conception in the summer of 1994, but only much later in 1994, in the "winter of 1994", when Rendleman had mechanical drawings.

Kice submitted, in reissue applicants' opinion, no formal report (**Orange Tab 2**).

Plaintiffs' patent expert Fiorito (**Strawberry Tab 3**) took issue with expert Pravel's initial position (**Light Purple Tab 5**) that Plaintiffs had derived the invention from Defendants or were equitably estopped (Fiorito Report pp. 8-9), took the position that certain of the '363 claims were

supported by Serial no. 08/435,798 (Fiorito Report pp. 8-9 and **Exhibit C** hereto), took the position that Rendleman was a co-inventor of at least '363 Claim 15 because of the means clause contained therein and '363 Fig. 2 (Fiorito report pp. 9-14), and that because of German MAN-Roland Gebrauchsmuster 93 05 552U and German abstracts (Patent blatt 113.Jhrg. Heft 28 (July 15, 1993) and WILA-GMA-Heft 28 (July 15, 1993) disclosing Fig. 1 and Claim 1 of 93 05 552U), the Gebrauchsmuster was "published" and that, in his opinion, in order to construe the '363 claims as being valid thereover, one had to include the cantilevered device limitations of the device made of Rendleman as part of the means claims:

"In my opinion, in order to construe the claims of the '363 patent for inventorship purposes it is necessary to review the disclosure in the German patent application in a manner that would attempt to preserve the validity [of] some or all of the claims of the '363 patent."

Note Fiorito report, p. 16.<sup>1</sup>

Fiorito concluded that the Gebrauchsmuster is "high pertinent prior art" against '363 (Fiorito, p. 15). Fiorito cited no case law for his position.

Lars Manke, a four year German patent agent, testified by way of an report as to the nature of German Gebrauchsmusters and that with respect to MAN-Roland Gebrauchsmuster G 93 05 552.8U, it was registered April 16, 1993 and that the registration "has been published in the official PATENT GAZETTE and in the unofficial UTILITY MODEL BULLETIN on July 15, 1993. Manke testified that from June 3, 1993 "any third party had the opportunity to get knowledge of the content of the above utility model" and that from July 15, 1993 the German application, while not "printed", could be inspected by any third party and was available on microfiche.

Reissue applicants have previously taken a position that Manke, not a lawyer, is not competent to be an expert.

## II. Defendants' Expert Positions

In his report (**Purple Tab 5**), Defendants' legal expert Pravel – formerly of the national patent firm Pravel, Hewitt, Kimball & Krieger – testified that based on the depositions of ex-PRI employees Baker, Bird, Garner and reissue applicants Davis and Williamson, and the PTO declarations and supplemental declarations of Baker and Bird that PRI, DeMoore and Rendleman derived the process invention from Davis and Williamson on June 12, 1994 at a restaurant meeting in Atlanta and that the earliest contention of DeMoore as to a possible conception – July 7, 1994 – being several weeks later, came as a result of Jesse Williamson's and Bill Davis' disclosure of the

<sup>1</sup> Defendants maintain that the July 7, 1993 patent abstract reports do not disclose reissue applicants' invention and that Fiorito's position is completely unsupported in the case law. Each of the claims have an inventorship based on their language and are either valid or invalid.

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invention to Baker several weeks earlier. Defendants' contention is supported by the supplemental declarations of Baker and Bird, of record.

Pravel in his first report also concluded that in view of the testimony of Baker and Bird that Jesse Williamson and Bill Davis disclosed at the offices of WPC in conference room "E" in January 1995 that WPC was going to file an application on the Davis-Williamson process and PRI was equitably estopped to challenge the '363 inventorship in Davis and Williamson view of a four-year delay citing Hottel Corp. v. Seamon Corp., 833 F.2d 1570, 1573, 4 USPQ2d 1939, 1941 (Fed. Cir. 1987) and MCV, Inc. v. King-Seely Thermos Co., 870 F.2d 1568, 1571 (Fed. Cir. 1989):

"The '363 patentees communicated to PRI employees Bird and Baker in January 1995 that they would file an application on what they considered to be their new, improved process. Bird testified that he considered the process to be that of the '363 patentees and made no objection.

"The PRI team – Bird, Rendleman and DeMoore – filed their patent application on May 4, 1995 but did not claim the '363 process. In fact, at no time to date did they amend their claims in Serial No. 08/435,798, even within the one year period permitted by law after the issuance of the '363 patent on May 20, 1997, to copy any of the issued '363 claims. Significantly, former PRI Vice-President Garner testified that they knew about the '363 patent in last 1997 or early 1998.

"Despite Garner's testimony, DeMoore and PRI indicated in their COMPLAINT that they did not know about the '363 patent until December, 1998 and learned about it only through a potential customer. *This connection lacks any credibility whatsoever, given DeMoore's intense interest in patents, his interest in a device to practice the '363 process, his financial interest in the equipment to practice the process, and his financial losses alleged in his Complaint. I have had many small to medium-sized clients who were manufacturing mechanical devices, and periodic review of the patent literature for competitive patents is commonplace. DeMoore's allegation of learning about the issuance of the '363 patent in December, 1998 is unbelievable.*

"Regardless, PRI's delay in [pursuing] and claim to the '363 invention or filing suit – of over four years – was unreasonable. MCV, *supra*. The first element of the Hottel test has been met.

"Defendant WPC's only hope of realizing significant income from the '363 process – other than selling printed materials made according to the process – is licensing the '363 process to others. As long as an inventorship fight hangs as a cloud over the '363 patent, licensing possibilities are remote, if not impossible. The second element of Hottel has clearly been not.

"PRI, having been told of the forthcoming filing of the application for the '363 process in January, 1995 and having done nothing in 1995, 1996, 1997 or 1998 to copy the '363 claims, while at the same time continuing to do business with Defendants during that time period, including, but not limited to, the construction and delivery of interstation coaters and driers in 1995-1997, induced Defendants



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Based upon the technical observations of Taylor and Prince, legal expert Pravel in his second and final report (Aquamarine Tab 8) concluded that Davis and Williamson had a conception as of June 1992 which was collaborated and complete and recognizable under U.S. law as of Bowyer's trip to the United States in October, 1992 (Pravel 11/16/2000 Report p.3, ¶4), and that such conception was further corroborated by former PRI employee Baker, testifying about the June 12, 1994 restaurant meeting in Atlanta (note Baker's Second Supplemental Declaration). Pravel concludes that Davis and Williamson had every right under the Agawam case to use the services of PRI without losing their right to a patent:

"According to the Rule 131 declaration mentioned in paragraph 4, and the testimony of each of Davis and Williamson in their respective depositions, Davis and Williamson had a discussion with Baker of PRI on **June 12, 1994**, in which they asked Baker of PRI to consider constructing a retractable device for WPC to perform the Davis/Williamson method. An inventor "may use the services, and aid of others in the process of perfecting this invention without losing his right to a patent." *Shatterproof Glass Corporation v. Libby-Owens Ford Company*, 758 F.2d 613, 624, 225 USPQ 634 (Fed. Cir. 1985) citing *Hobbs v. U.S. Atomic Energy Commission*, 451 F.2d 849, 864, 171 USPQ 713 (5<sup>th</sup> Cir. 1971); see also, *Hess v. Advance Cardiovascular Systems, Inc.*, 106 F.3d 976, 980-981, 41 USPQ2d 1792, 1786 (Fed. Cir. 1997). Furthermore, Fig. 2 of the '363 patent, according to the expert report of Jim Taylor, was within the method concept of Davis and Williamson. See paragraph 47, Expert Report of Taylor. Williamson and Davis hired PRI to make an auxiliary, retractable interstation coater with an anilox roller and chambered doctor. Under the applicable law, Davis and Williamson had the right to have a vendor or contractor at arms length perform the construction of a device for use with their inventive method to reduce the invention to practice. Based on one of the landmark patent cases of the United States Supreme Court, an inventor may hire another to construct a device to perform his invention, and such hiring does not operate to create a joint invention because the intellectual property rights of the contractor belong to the true inventor. See *Agawam Company v. Jordan*, 74 U.S. (7 Wall.) 583, 19 L. Ed. 177(1868). Under the *Agawam* case, the cantilevered device technology, whether or not patentable, becomes the property of Davis and Williamson. According to expert Taylor, there were at least seven known techniques in 1994 of accomplishing the concept of the Davis and Williamson method. Nuances in the construction of an apparatus to perform the Davis/Williamson process do not change inventorship of the method or ownership rights with respect to the apparatus:

"... such suggested improvements are in general to be regarded as the property of the party who discovered the original principle, and may be embodied in his patent as part of his invention."

"*Agawam*, 19 L. Ed at 182. See also, *Amax Fly Ash Corporation v. United States*, 206 Ct. Cl. 756, 514 F.2d 1041, 1050, 182 USPQ 210, 185 USPQ 437 (Ct. Cl. 1975); *Mueller Brass Co. v. Reade Industries*, 352 F.Supp. 1357, 1374, 176 USPQ 361 (E.D.P.A.



1972); *Rodgard Corporation v. Miner*, 914 F.Supp. 907, 917-918 (W.D.N.Y. 1995)."

Pravel 11/16/2000 Report, ¶6. Pravel also concluded that DeMoore's contention as to a PRI alleged conception of the '363 invention in DeMoore or Rendleman lacked corroboration (Pravel 11/16/2000 Report, ¶9, citing Burroughs Welcome Co. v. Barr Lab Inc., 40 F.3d 1223, 1228, 32 USPQ2d 1915 (Fed. Cir. 1994); Price v. Symmel, 988 F.2d 1187, 1194-1196 (Fed. Cir. 1993); and AMP, Inc. v. Fujitsu Microelectronics, Inc., 853 F. Supp. 808, 821-822 (N.D. Pa. 1994)) and that the '363 method is not revealed in the Rendleman November 1994-February 1995 drawings. *Id.*, ¶10. Pravel also concludes that as Serial No. 08/435,798 did not satisfy the "how to use" requirements of 35 USC § 112, 1<sup>st</sup> paragraph, that it was non-enabling as well, citing In re Gardner, 427 F.2d 786, 789, 166 USPQ 138 (CCPA 1970) *Id.*, ¶¶110-11. Pravel indicates that joint inventorship of the '363 patent is impossible, as the parties (PRI and WPC) never collaborated and there was no testimony of same. *Id.*, ¶12.

Pravel also concluded that none of the claims of the four "double bump" PRI applications leading to U.S. Patents No. 5,598,777; No. 5,651,316; No. 5,960,713; and No. 6,116,158 have support in Serial No. 08/435,798 (Pravel 11/16/2000 Report ¶¶ 18-20).

#### **REISSUE APPLICANTS' ANALYSIS OF THE EXPERT REPORTS**

The uncontradicted testimony shows that Davis and Williamson conceived of their invention in early June, 1992 and that said invention was corroborated first in October, 1992 (Note old 35 U.S.C. §104) upon the visit to the United States by Harry Bowyer and further corroborated by their transmission of the conception to PRI's salesman Baker on June 12, 1994 at an Atlanta restaurant. WPC experts Pravel and Taylor opine the disclosure was enabling. The PRI expert is silent on this point. According to both Baker and his superior Bird, that conception was given to DeMoore sometime in the next several days following June 12, 1994, probably June 15, 1995. DeMoore vigorously disputes this testimony and indicates that he arrived at the conception independently on July 7, 1994 and told his employee Rendleman. Bird and Baker testify in their supplemental declarations, and Bird testified in his September deposition that DeMoore was told about the Davis-Williamson process on June 15, 1994 at PRI's offices in Dallas, Texas.

WPC experts Taylor and Prince both testify that neither the November 1994 - February 1995 Rendleman drawings of PRI or the PRI patent application Serial No. 08/435,798 were enabling. The WPC experts point to alleged "how-to-use" and motivational deficiencies in the fall-winter drawings for the claimed method, and the failure of the patent application to incorporate by

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reference (or teach the equivalent of) the "WIMS" patent, U.S. Patent No. 5,370,976 to Williamson, et al.

WPC experts Taylor and Prince both testify that a variety of auxiliary retraction devices existed as of both June 1992 and June 1994 which could be modified to practice the Davis-Williamson methodology. There were seven different types in all. Expert Taylor laboriously went through each of the seven prior art methods and investigated the known prior art to each, including the cantilevered or "ferris wheel" type. Taylor concluded that PRI could be fairly described as a novice as of fall 1994 in auxiliary retractable coater design (pp. 24-26, ¶47), which explained excessive time and money to make their cantilevered devices for WPC. Prince indicates (p. 13, ¶8(s)) that PRI's reputation ranks below Dahlgren and Epic in the auxiliary coater market, and that very few of DeMoore's patents pertain to commercial devices. *Id.*

Based upon the technical analysis of Prince, Pravel concludes that neither the '713 patent or its three sisters (the '777, the '316 and the '158) could ever properly claim the benefit of the filing date of Serial No. 08/435,798 – May 4, 1995. Pravel 11/16/2000 Report, ¶¶18-19 at pp 17-20. Pravel also concluded that the '713 was inequitably procured, as the '713 patentees did not timely disclose the '363 Davis-Williamson patent and withheld foreign published counterparts of Serial No. 08/435,798, including EP 741,025 (A2) and EP 741,025 (A3).

Late in the litigation, as the cumulation of fact witness depositions and expert witness testimony showed that PRI it had a losing position.

At the inception of the litigation, DeMoore contested he was the sole inventor of the '363 claims. In his Amended Complaint, DeMoore said he and Rendleman were co-inventors of all the claims. After the depositions, PRI started backtracking again on its inventorship positions and maintained that Rendleman was only a co-inventor of Claims 15-16 with Davis and Williamson, maintaining that the ferris wheel device of Fig. 2 was the only "means" disclosed in the '363 to perform the invention and had to equate to the "flexographic ink-providing means".

The assertion that Claims 15 and 16 are limited to a retractable ferris wheel coater under 35 U.S.C. §112, paragraph 6, is incorrect. The "flexographic ink-providing means" element of Claim 15 is a means-plus-function element in which the function is "applying a flexographic ink to said blanket cylinder to form an image." Since the structure described in the specification to perform this function is an anilox roller (see, e.g. col. 7, lines 1-4, 41-44 and 49-52), the "flexographic ink-providing means" element of Claim 15, as properly construed, covers an anilox roller and equivalents thereof. Under the applicable case law, it would be improper to include the ferris wheel retraction mechanism as a part of the "flexographic ink-providing means" because §112, paragraph 6, does not "permit incorporation of structure from the written description beyond that necessary

Figure 1 consists of 12 histograms arranged in a single column. Each histogram represents the distribution of the number of non-zero elements in the vector  $x$  for a specific value of  $n$ . The values of  $n$  are 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, and 120. The x-axis for each histogram is labeled 'Number of non-zero elements' and ranges from 0 to  $n$ . The y-axis is labeled 'Frequency' and ranges from 0 to 10. The histograms show that as  $n$  increases, the distribution of non-zero elements shifts to the right, with the peak frequency increasing and the distribution becoming more spread out.

Thus, there is no basis to assert that Rendleman is a co-inventor of Claims 15 or 16 because, among other reasons, these claims by operation of law are not limited to a retractable ferris wheel coater.

*Robert A. Katz*

**FALK & FISH, L.L.P.**  
P.O. Box 794748  
Dallas, Texas 75379  
Telephone: (214) 954-4400  
Facsimile: (214) 969-5941

-10-

| Table 1. Demographic characteristics of the study population |             |
|--------------------------------------------------------------|-------------|
| Age (years)                                                  | 65.8 ± 1.2  |
| Gender                                                       |             |
| Male                                                         | 50.0        |
| Female                                                       | 50.0        |
| Education (years)                                            | 12.5 ± 0.5  |
| Income (USD/month)                                           | 1,200 ± 100 |
| Marital status                                               |             |
| Married                                                      | 60.0        |
| Single                                                       | 40.0        |
| Health status                                                |             |
| Good                                                         | 70.0        |
| Fair                                                         | 30.0        |
| Bad                                                          | 0.0         |
| Smoking status                                               |             |
| Smoker                                                       | 20.0        |
| Non-smoker                                                   | 80.0        |
| Alcohol consumption                                          |             |
| Regular                                                      | 10.0        |
| Occasional                                                   | 30.0        |
| Never                                                        | 60.0        |
| Comorbidities                                                |             |
| Hypertension                                                 | 40.0        |
| Diabetes                                                     | 20.0        |
| Cholesterol                                                  | 30.0        |
| Arthritis                                                    | 10.0        |
| Depression                                                   | 5.0         |
| Other                                                        | 5.0         |



§ Group Art Unit: 2854

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§ Examiner: S. Funk

J. Hilten

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Robert Hardy Falk

THE UNIVERSITY OF CHICAGO



Martin J. Sweeney  
State Bar No. 19570550  
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(214) 462-3024  
(214) 462-3299 (facsimile)

ATTORNEYS FOR PLAINTIFFS

**CERTIFICATE OF SERVICE**

I hereby certify that the foregoing "Plaintiffs' Expert Designation and Reports" was served on Defendants' counsel by United States Postal Service Express Mail on October 5, 2000:

John P. Pinkerton  
WORSHAM, FORSYTHE & WOOLDRIDGE, L.L.P.  
1601 Bryan, 30th Floor  
Dallas, Texas 75201  
(214) 979-3065  
(214) 880-0011 (Facsimile)

  
Attorney for Plaintiffs

## EXHIBIT A

**Prof. W.S. Mott**

*Printing Technology Consultant*  
2359 Leona Avenue  
San Luis Obispo, CA 93401-5368  
Voice 805-544-5339  
Fax 805-545-8723  
sjmott2359@aol.com

William D. Harris, Jr, Esq.  
Locke Liddell & Sapp, LLP  
2200 Ross Avenue, Suite 2200  
Dallas, TX 75201-6776

**REPORT**

My name is William Stephen Mott, my Curriculum Vitae is attached. My printing industry experience extends from 1958 to the present. I was employed in the printing industry for approximately 10 years prior to accepting a position at the University. Currently I am a professor of Graphic Communication at California Polytechnic State University at San Luis Obispo where I have been employed for 32 years specializing in sheet fed offset lithography and the control of its quality. My teaching assignment also includes instruction on papers and inks. I conduct undergraduate classes, provide consulting services to the industry, and teach continuing education seminars to industry personnel.

I have been retained as an expert witness by the law offices of Locke Liddell and Sapp LLP. My compensation is \$150 per hour for research and \$300 per hour for testimony. I am familiar with Printing Research, Inc., but have never been employed by that company. I performed work as a consultant in the case of Printing Research Inc. vs International Paper Co. through the engagement by outside counsel for Printing Research Inc. I have not given testimony in court or by deposition within the past four years.

I have read portions of:

Patents 5,370,976 and 5,630,363 held by Williamson Printing Corporation;  
Specification Accompanying Patent Application of the named Inventors  
Rendleman, DeMoore and Bird filed May 4, 1995;  
Joint Declaration under 37 C.F.R. §1.57(b) of Davis & Williamson of May 20, 1999;  
Joint Declaration under 37 C.F.R. §1.131 of Davis & Williamson of June 30, 2000;  
Supplemental Joint Declaration of Davis & Williamson of May 9, 2000;  
Summary of Interview for July 20, 2000;  
Deposition of Steven Baker of August 9, 2000;  
Deposition of Scott Brown of August 10, 2000;



Deposition of Steve Garner of August 11, 2000;  
Graphic Arts Monthly magazine article of June 1995 "In-Line Coating Spurs  
Sheetfed."

Prior to deposition I intend to review:  
Deposition of John Bird, Sept. 12, 2000;  
Deposition of Bill Davis, Sept. 20, 2000; and  
Other depositions that may become available.

I intend to review for the court the basics of printing such as how printing ink is applied to paper and subsequently dries, the differences, advantages and disadvantages of offset lithography and of flexography. I anticipate presenting photographs and diagrams of a multicolor offset lithographic press and of a flexographic printing unit.

The lithographic offset printing process is a planographic rotary process whereby the image and non-image areas on the printing plate are in the same plane and which chemical treatments ensure that ink adheres to some areas and not others. The image is transferred (offset) indirectly from the plate cylinder to a rubber blanket cylinder and finally to the substrate. The plates are thin sheets of aluminum. The inks are viscous polymeric compounds that are applied to the substrate in very thin layers, are generally transparent, and dry over time. Lithographic offset is utilized to print products for industry segments such as corporate annual reports, books, magazines, greeting cards, stationery, invitations, business forms, advertising and promotional items, folding cartons for packaging, and product brochures.

Flexography is a method of direct rotary printing that uses resilient relief image plates of rubber or photopolymer (plastic). The inks are liquids of either solvent or aqueous base which are applied from 50% to 100% greater thickness than lithography and which dry rapidly. This greater film thickness allows for opaque inks to be printed. Flexography is utilized to print products such as plastic shopping bags, aluminum foil for food product wrappers and consumer items, corrugated shipping boxes, gift wrap paper, wall paper, milk and beverage cartons, folding cartons, paper sacks, tags and labels.

Lithoflex™ is the trademark for a combination of two printing processes by which I mean offset lithography and flexography, both performed on one machine. I will

describe the advantages of Lithoflex™ in that only one pass through a press is required to print both processes and only one press is required. In-line processing reduces the time required to manufacture a product therefor realizing cost reductions. Significant investment savings also occur, as fewer machines are required. I will discuss the differences between convertible and dedicated printing stations on a press.

The Rendleman coater is an accessory device mounted on an offset lithographic press for the purpose of adding flexographic printing capabilities to the that press, i.e., Lithoflex™, which is described in the Patent Application of May 4, 1995 mentioned above. I expect to show still photographs of an operating press which has the Rendleman coater installed and operating. I expect to show video of another Rendleman coater on a test stand. The defendant may view these photographs and/or video at a convenient time and place. I expect to show examples of Lithoflex™ products printed using the Rendleman coater.

I expect to testify that Patent '976 does not state which type of printing plate material is to be used nor does it state the printing process to be used. This information would have to be inferred or assumed by those who are degreed and experienced in the printing industry. The '976 has little, if any, bearing or or relation to the '363 patent.

In my opinion, the disclosure in the May 4, 1995 Patent Application by Printing Research Inc., would enable an experienced, educated person in the commercial printing industry to understand the nature of the device, how it is mounted on an offset lithographic press and the manner in which the device is utilized for printing. It would certainly teach the process of printing in-line in a single pass of flexography followed by one or more lithographic steps.

I was asked to consider when and what constituted a sufficient mental formulation by the inventor(s) of a complete idea for a product or process in the present matter. I was to consider that the idea must be of specific means, not just a desirable end or result, that must be sufficiently complete so as to enable anyone of ordinary skill in the art to reduce the concept to practice. In the context of on-line upstream single pass flexographic printing followed by lithographic printing, the ferris wheel coater

(Rendleman coater) mounted upstream in combination with a multi-station press accomplishes this. The summer of 1994 discussions between Howard DeMoore and Ronald Rendleman, followed by the sketches of the winter of 1994, and particularly of December 30, 1994 by Rendleman meet the foregoing requirements.

In a broader sense, the summer disclosure of Mr. DeMoore to Mr. Rendleman by which his thinking or concept was disclosed by his inquiry to Mr. Rendleman of whether he could place a coater interstage discloses the recognition by Mr. DeMoore of the desirability of having a convertible (from lithographic) flexographic step or station upstream of lithographic stations. This convertible concept contrasts with a dedicated flexographic station to provide the upstream flexographic step. When the ferris wheel type coater is used the concept involves the use of a convertible flexo/litho station. I have not yet formulated an opinion as to whether the disclosure involving only generally flexo before litho (single pass) constitutes a sufficiently complete idea to teach one how to practice or perform but I expect to supplement this report if I do. I do believe now that this is a broad idea that may be short of a concrete concept. The addition of a convertible printing station with a Rendleman coater provides a specific means to accomplish the desired result.

Also, I have noted the lack of a specific means in many of the concepts of 1994 testified by affidavit and deposition. I believe the scope of the invention(s) at issue may be ultimately of some importance in determining this matter, but not being a patent lawyer nor an expert on patent law, I cannot speak to ultimate points of law in my opinions.

I am of the opinion that the language and teaching in Patent Application filed May 4, 1995 is quite sufficient to teach one of ordinary skill in the art how to practice the invention ultimately described in the '363 patent. This is based on a review of the May 4, 1995 application and the '363 patent. Moreover, I also believe that the May 4, 1995 application likewise teaches how to practice the concepts developed by DeMoore and Rendleman that are described above in the preceding paragraph.

The drawing dated Dec. 30, 1994 from Printing Research is virtually identical to the mechanism illustrated in the Application of May 4, 1995 and in my opinion is one and

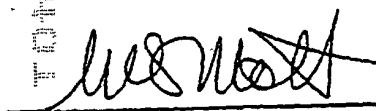
the same. Moreover, it is essentially the same as sketched in Figure 2 of the '363 Patent, and it clearly suggests the Lithoflex™ process.

The simulation of a two color in-line process by instead printing those two colors in two separate passes reveals little of the feasibility of the in-line process, only the desirability, as the dynamics of ink drying and trapping are significantly different between the two methods.

I am not a patent attorney nor am I skilled in the law of patents. I express no views, opinions of what is and what isn't an invention or who is entitled to priority of invention, I speak only to the extent that I am given definitions or tests or hypothesis to consider.

I reserve the right to supplement my opinion as I become aware of additional materials that might make supplementation reasonably necessary.

This testimony will be based upon my observations, expertise, and 40 years experience in the printing industry plus the materials I have reviewed in the case (see above).



William Stephen Mott

October 4, 2000

**PARTICIPATION IN PROFESSIONAL ASSOCIATIONS AND ORGANIZATIONS:**

Group Discussion Leader, GAERF Teacher Conference, Philadelphia, 1994

**Active Memberships in:**

Graphic Arts Technical Foundation, Sewickley, PA.  
Research & Engineering Council, White Stone, VA

**PUBLICATIONS, PAPERS PRESENTED:****Articles:**

"Getting Levers Off the Presses," Dealer Communicator, Nov. 1989.

"IR and UV Drying" High Volume Printing, June, 1988

"Your Duplicators 'Can Do' Four Color Printing!" Quick Printing, Sept. 1987

"Where Stands Standardization for Sheetfed?" High Volume Printing,  
Oct. 1987

"Manufacturers as Educators," Graphic Arts Monthly, July, 1986

"Marketing, Italian Style," Graphic Arts Monthly, November, 1984

"The Metric System in Printing," Printing Journal of N. California, 1975

**Books:**

*Printing Four Color Process on a Duplicator or Small Press*. San Luis Obispo (CA), 1992, Graphic Services+Seminars.

**Papers presented:**

"Where Stands Standardization for Sheetfed? A Study of the Practices and Attitudes of Sheetfed Commercial Printers in the West." Technical Association of the Graphic Arts (TAGA), March, 1987.

FOR "SECRET"

**CURRICULUM VITAE**

**W. STEPHEN MOTT, Professor**  
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 California Polytechnic State University  
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**EDUCATION:**

M.A., Education--Specialization in Curriculum and Instruction,  
 California Polytechnic State University, SLO, 1973  
 B.S., Printing Engineering, California State Polytechnic College, SLO, 1959

**PROFESSIONAL EXPERIENCE:**

Professor, Graphic Communication Department, 1982 to present, specializing in sheet fed offset lithography and its quality control, papers and inks  
 Acting Department Head, Graphic Communication, 1989-90  
 Associate Professor, Graphic Comm. Dept., 1977-1982  
 Assistant Professor, Graphic Comm. Dept., 1972-1977

**RELATED PROFESSIONAL EXPERIENCE:**

Expert witness in six actions, 1993 to 1999  
 Consultant to more than 25 clients in printing industry, 1974 to present  
 Education Consultant, Heidelberg West, Inc., 1985-86  
 Equipment Technician II, Graphic Comm. Dept., 1968-1972  
 Supervising Press operator, Comm. Printers Co., Tucson, 1963-1968

**APPLIED RESEARCH PROJECTS:**

New Product Development, Hurst Corp., 1999  
 New Product Testing, Boise Cascade Corp., 1999  
 Print Quality--Color Inks, Base-Line Co., 1997  
 Print Quality--Black Ink, Base-line Co., 1997  
 Plate Print Quality Testing, Base-Line Co., 1996

**CONSULTING ACTIVITIES:**

Blake Printery, San Luis Obispo, 1995, Color Control with Spectrophotometers  
 DowBrands, Inc., Indianapolis, 1991, Printing Specifications  
 Potlatch Corp., Idaho, 1991, Print Quality Analysis  
 United Nations, Intl. Trade Center, Export Promotion Project for S.E. Asia, Bangkok, 1990  
 Heidelberg West, Inc., San Francisco, 1990, Air Quality Measurements  
 Sun Chemical Corp. (GPI), San Luis Obispo, February 1990, Process Color  
 Calif. State Employees Assn., San Jose, March 1989, Process Color Printing  
 Weyerhaeuser Company, 1989, Flexography Printability Testing  
 Printing Impressions Company, Santa Barbara, 1988, Equipment Acquisition  
 Gaylord Corp., 1987, Flexographic Printability Testing  
 Weyerhaeuser Company, 1987, Lithographic Printability Testing  
 Mervyn's, Hayward, Calif., 1986, Process Color Printing  
 Speedway Copy Systems, San Francisco, 1986, Process Color Printing  
 Heidelberg West, Inc., San Francisco, 1985-6, training curricula & techniques  
 U.S. Penitentiary, Lompoc, CA, rehabilitation printing technology, 1984-85  
 Thirteen other firms. Consultant services provided in areas of equipment acquisitions, modifications and repairs, operational techniques, employee training 1974-83

10427 262500

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IN THE UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF TEXAS  
DALLAS DIVISION

PRINTING RESEARCH, INC.,  
HOWARD W. DEMOORE,

Plaintiffs,

v.

WILLIAMSON PRINTING CORP.,  
BILL L. DAVIS, and  
JESSE S. WILLIAMSON,

Defendants.

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CIVIL ACTION NO. 3-99CV1154-M

PLAINTIFFS' EXPERT DESIGNATION AND REPORTS

Plaintiffs, Printing Research, Inc. and Howard W. DeMoore, (collectively "Plaintiffs"), designate the following as experts for this action and herewith submit their reports as Exhibit A and Exhibit B under Rule

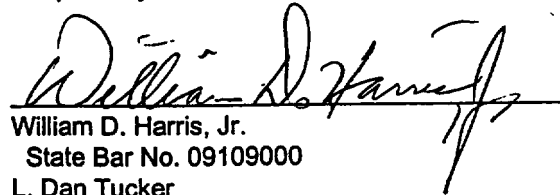
26(a)(2):

Professor W.S. Mott  
2359 Leona Avenue  
San Luis Obispo, CA 93401-5368

Warren B. Kice  
Haynes and Boone, LLP  
901 Main Street, Suite 3100  
Dallas, Texas 75202-3789

The report of Dr. Mott, who lives in California, was sent by fax. A signed ribbon copy will be tendered for filing when it arrives. It is expected on October 6, 2000.

Respectfully submitted:



William D. Harris, Jr.  
State Bar No. 09109000  
L. Dan Tucker  
State Bar No. 20276500  
Stephen D. Wilson  
State Bar No. 24003187  
LOCKE LIDDELL & SAPP LLP  
2200 Ross Avenue, Suite 2200  
Dallas, Texas 75201-6776  
(214) 740-8000  
(214) 740-8800 (facsimile)



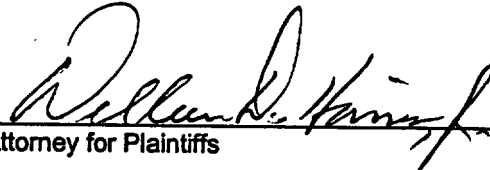
Martin J. Sweeney  
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Dallas, TX 75201  
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(214) 462-3299 (facsimile)

ATTORNEYS FOR PLAINTIFFS

**CERTIFICATE OF SERVICE**

I hereby certify that the foregoing "Plaintiffs' Expert Designation and Reports" was served on Defendants' counsel by United States Postal Service Express Mail on October 5, 2000:

John P. Pinkerton  
WORSHAM, FORSYTHE & WOOLDRIDGE, L.L.P.  
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(214) 880-0011 (Facsimile)

  
Attorney for Plaintiffs

## Printing Research, Inc. v. Williamson Printing Corporation

### LEGAL EXPERT'S REPORT

My name is Warren Kice and my curriculum vitae is attached. I have been a partner with the law firm of Haynes and Boone since 1987 and have 37 years of experience in patent law. I have been retained as an expert witness by the law firm of Locke, Liddell and Sapp. My compensation is \$410 per hour.

In the past, I have been designated as an expert witness and deposed in the following lawsuits:

1. Printing Research v. John Bird d/b/a JB Machinery, Inc.; JB Machinery, Inc., and Absolute Images, Inc. d/b/a The Nelson Group, Inc.
2. Mountain Math, Inc. v. Summit Educational Enterprises, Inc.

My latest publication is a document entitled: "Writing and Prosecuting Winning Patents, published on August 26, 2000.

In connection with the present lawsuit I have reviewed at least a portion of each of the following documents:

1. Patent Application entitled "RETRACTABLE INKING/COATING APPARATUS HAVING FERRIS MOVEMENT BETWEEN PRINTING UNITS";
2. U.S. Patent 5,630,363
3. Joint Declaration (1) Under 37 C.F.R. § 1.131 AND (2) Pertaining To Derivation By DeMoore and Printing Research, Inc. of Reissue Applicants' Invention of Bill L. Davis and Jesse S. Williamson;
4. Joint Declaration Submitted Under 37 C.F.R. § 1.57(b) of Bill L. Davis and Jesse S. Williamson;
5. Supplemental Joint Reissue Declaration of Bill L. Davis and Jesse S. Williamson;
6. Summary of Interview Under 37 C.F.R. §1.133;
7. Reissue Declaration of Bill L. Davis and Jesse S. Williamson;
8. Various Patent Statutes;
9. Various Sections of the Manual of Patent Examining Procedure;
10. Prof. W. S. Mott's Draft Report.

I intend to review for the court the basis of some areas of the patent law as they may apply to this lawsuit. Included will possibly be the basics of inventorship including joint inventorship; conception, reduction to practice and diligence; and possibly derivation of invention.

More particularly, I expect to testify that certain employees, possibly including Howard DeMoore and Ronald Rendleman, of Printing Research, Inc. may be, in fact, the inventors of the invention disclosed and claimed in U.S. Patent No. 5, 630,363 (the "'363 patent"), or at least joint inventors with the currently named inventors of the '363 patent.

[illegible]

I may testify as to the scope of the invention in the '363 patent, but I am informed that the necessary facts and subjects in this respect have not yet been discovered in this lawsuit to enable me to opine at this time.

W. A. K.

- 2 -

## **CURRICULUM VITAE**

### **WARREN B. KICE**

Warren Kice is a partner in the Intellectual Property Section of Haynes and Boone. He has over 35 years of practice of intellectual property law, beginning with a period of employment at the United States Patent and Trademark Office in Washington D.C., as a Patent Examiner. He then entered private practice in Washington D. C. before joining Haynes and Boone in Dallas where he founded the Intellectual Property/Technology Section in 1987.

His practice consists primarily of preparation and prosecution of patent and trademark applications before the U.S. Patent and Trademark Office and litigation of patent and trademark matters, including expert witnessing. Other areas of his expertise include patent and trademark licensing, copyright prosecution and litigation and counseling clients regarding all phases of intellectual property. Related activities include presenting papers and speeches on intellectual property and training younger lawyers in the field.

Mr. Kice has written and prosecuted over 500 patent application in a myriad of technological areas, including power plant equipment (boilers, feedwater, heaters, turbines, fluidized beds), fire protection systems, automotive engines, tire manufacturing equipment, downhole oil field equipment, gasoline dispensing and vapor recovery systems, fluid valves, and electrical cables and connectors.

Mr. Kice is a member of the State Bar of Texas, the Intellectual Property Section of the State of Texas, the American Bar Association Sections on Litigation and Patent, Trademark and Copyright Law, the American Intellectual Property Law Association, the Dallas/Fort Worth Patent Law Association, the Licensing Executive Society and The United States Trademark Association.

Born in Ada, Oklahoma, Mr. Kice earned a degree in mechanical engineering in 1959 from the University of Oklahoma and his law degree in 1962 from the University of Oklahoma.

DIRECT DIAL TELEPHONE NUMBER: 214/651-5634

INTERNET ADDRESS: [kicew@hayboo.com](mailto:kicew@hayboo.com)

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NEW YORK, N. Y.

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PRINTING RESEARCH, INC.  
HOWARD W. DEMOORE, and  
RONALD M. RENDLEMAN

**v.**

CIVIL ACTION NO. 3-99CV1154-M

WILLIAMSON PRINTING CORP.,  
BILL L. DAVIS and  
JESSE S. WILLIAMSON,

THIS DOCUMENT IS DESIGNATED AS CONFIDENTIAL - SUBJECT TO PROTECTIVE ORDER, IN ACCORDANCE WITH PARAGRAPH 15, PAGE 9, OF THE PROTECTIVE ORDER SIGNED JUNE 8, 2000.

I, Edward G. Fiorito, make the following report:

I. Statement of Opinions to be Expressed at Trial and Reasons Therefor

### A. Introduction

- Expert Witness Report  
of Edward G. Florito  
Civil Action No. 3-99CV1154-M**

October 11, 2000 (WPC Counterclaims); Reissue Applicants First Submissions of Deposition Testimony and Submission of Supplemental Declarations, dated October 13, 2000, in the reissue application for U.S. Patent 5,630,363 (Reissue Submissions); and Reissue Applicants' Third Supplemental Patent Statement of Prior Art and Other Information, dated September 27, 2000 (Statement of Prior Art).

### Complaint

3. The First Amended Original Complaint filed September 11, 2000 by PRI against defendants, Williamson Printing Corp., Bill L. Davis, and Jesse S. Williamson, (WPC) set forth PRI's assertions and the background in this case. The action seeks to correct the designation of inventorship which currently appears on United States Patent Number 5,630,363 (363 patent) under 35 U. S. C. § 256.

4. During 1994 and 1995, DeMoore and Rendleman conceived, developed and reduced to practice a single-pass printing process and apparatus having successive printing stations for selectively applying printing and coatings to paper and other substrates, in which one of the stations is utilized as a flexographic process and at least one of the successive stations utilizes a lithographic process. This new invention was termed "Lithoflex®" system. DeMoore, Rendleman, and Printing Research developed a commercial apparatus, termed a printer/coater unit for use with



existing printing presses, which would allow those printing presses to utilize the Lithoflex® system.

5. Printing Research is licensed under DeMoore's and Rendleman's rights to the Lithoflex® system and the printer/coater unit.
6. By October 1994, PRI tested certain flexographic coating technology using a two-color Heidelberg lithographic press located at a Printing Research facility. By December 1994, Rendleman had reduced to drawings the concept of a printer/coater unit that would move a retractable mechanism with a ferris-wheel-type motion.
7. WPC utilized a Heidelberg press that was of the size and type appropriate for further development of the Lithoflex® system. PRI contacted WPC in order to secure use of the WPC Heidelberg press facilities.
8. In 1994 and 1995, PRI disclosed to WPC, including Davis and Williamson, the Lithoflex® system and the printer/coater units. WPC agreed to keep the disclosure confidential.
9. WPC and PRI entered into a purchase agreement for several printer/coater units for WPC to install on its presses.
10. On August 14, 1995, Davis and Williamson filed U.S. Patent Application Serial Number 515,097 (097 application), for a "Combined Lithographic/Flexographic Printing Apparatus

and Process" in the United States Patent and Trademark Office (USPTO). The 097 application named only Davis and Williamson as inventors, was assigned to WPC, and issued as United States Patent Number 5,630,363 (363 patent).

11. WPC never informed PRI of an intent to file the 097 application.
12. On May 20, 1999 and WPC filed Reissue Application Serial Number 09/315,796 (796 reissue application)
13. PRI requests that Davis and Williamson be removed as named inventors on the 363 patent, and DeMoore and Rendleman be added. In the alternative, PRI requests that DeMoore and/or Rendleman be added as joint inventors.

**Answer**

14. WPC filed an answer on June 10, 1999 asserting that PRI knew that WPC would pursue patent protection at least as early as January 1995. WPC further asserted that PRI is barred from claiming sole or joint inventorship of the 363 patent because they failed to file a challenge or protest with the USPTO regarding the issuance of the 363 patent, and failed to assert any inventorship allegations within one year of the issuance of the 363 patent as required by 35 U.S.C. § 135(b).

**WPC Counterclaim**

15. On Oct. 11, 2000, WPC filed a motion to be permitted to file a pleading called Counterclaims with a Factual Background section. According to WPC, around June 1992, Davis and Williamson conceived a new and improved printing process combining flexographic and lithographic printing in a continuous in-line process in which, among other things, flexographic printing or coating would take place upstream, or at a first printing station, on an offset lithographic press prior to printing with the lithographic process. The conception, according to WPC, included a modification of a conventional "rack-back" that would be a retractable unit for printing and coating with an anilox roller for use on any printing or coating unit on a lithographic press so that the anilox roller could be brought into position for use and retracted to an out of the way location when not in use (modified rack-back).
16. By June 12, 1994, Davis and Williamson allegedly disclosed and described the combined flexographic/lithographic process to Steve Baker who was a salesman for PRI.
17. Around June 15, 1994, Baker allegedly told John Bird about the combined flexographic-lithographic process. According to WPC, Baker and/or Bird disclosed it to DeMoore.
18. According to WPC, by July 7, 1994, DeMoore disclosed it to Rendleman.

19. WPC alleges that, in January 1995 Davis and Williamson told Bird and Baker that WPC was going to file a Patent application.
20. On about February 11, 1995, PRI informed WPC that PRI would manufacture a modified rack-back for WPC designated by PRI as the EZ Interstation Flexo Printer/Coater.
21. Rendleman, DeMoore, and John W. Bird filed a United States Patent Application Serial Number 08/435,798 on May 4, 1995, entitled "Retractable Inking/Coating Apparatus Having Ferris Movement Between Printing Units" (798 application).
22. In Count 1 of the WPC Counterclaim, WPC states that the EZ Interstation Flexo Printer/Coater was a retractable device included in the combined flexographic-lithographic process of Davis and Williamson: "In fact, the EZ Interstation Flexo Printer/Coater as shown in Figure 2 and described in the '363 patent was made by PRI using ordinary skill in the art, without extensive research and experimentation."
23. According to WPC, all rights to the EZ Interstation Flexo Printer/Coater are owned by WPC, including the 798 patent application.

#### Reissue Submissions

24. During the prosecution of the 363 patent reissue application before the USPTO, WPC filed on Oct. 13, 2000,

arguments concerning the issues of inventorship and derivation.

25. Deposition testimony of Steven Baker was referenced for the purpose of attempting to demonstrate that none of PRI's employees had any part in the invention of the 363 patent.

26. Deposition testimony of Scott Brown was referenced to confirm that Williamson and Davis told him about their process invention, now embodied in the 363 patent, in mid-1994, as early as "late spring" of 1994.

27. Deposition testimony of Steve Garner was referenced to support the conclusion that WPC originated the 363 process.

28. Deposition testimony of John W. Bird was referenced to support the conclusion that Bird, DeMoore and Rendleman had nothing to do with the inventorship of the 363 process.

B. Guiding Principles

29. In forming my opinions and explaining my analysis to the jury, I will be guided by basic principles found in the statutes and case law which are listed in an attachment hereto entitled "Guiding Principals". I do not anticipate that I will be asked to describe the principles at length, but will be prepared to do so if I am asked by counsel and permitted by the Court.

C. Opinions on Issues raised in WPC Documents

Pravel Report

30. I have been asked by counsel for PRI to review the recent export report of Mr. Pravel and respond to issues raised therein.

#### **Issue of Derivation**

31. Mr. Pravel provides references to depositions and declarations, but does not reference the invention as claimed and the 798 patent application. Mr. Pravel does not attempt to link any of the claims, or elements of the claims, to the information allegedly transferred to PRI.

32. Accordingly, without more, it is my opinion that the evidence relied upon by Mr. Pravel in his report is insufficient to establish that PRI derived the invention claimed in the 798 patent application from WPC.

#### **Equitable Estoppel**

33. Mr. Pravel indicates in paragraph 26 of his report that the 798 patent application of PRI does not claim the 363 process. In my opinion, it is not necessary for PRI to include claims corresponding to the claims in the 363 patent in order to assert that PRI is the inventor of the 363 patent claims.

34. The drawings and specification of the 798 patent application teach the invention defined in the claims of the 363 patent, and in my opinion provide support for the 363 patent claims. The exhibit attached hereto entitled "Claim

Chart of 363 Patent Claims and Corresponding Support in 798 Patent Application" demonstrates the correspondence between elements of the claims of the 363 patent and specification and drawings of the 798 patent application.

35. It is my opinion that the drawings and specification of the 798 patent application provide evidence that PRI is the inventor of the 363 patent claims.

WPC Counterclaims

36. Counsel for PRI has asked me to address issues raised in the recently filed WPC Counterclaims.

Inventorship

37. In paragraph 22 of the WPC Counterclaims, a representation is made that the EZ Interstation Flexo Printer/Coater is shown in Figure 2 and described in the 363 patent. In my opinion, this figure and description is essential for interpreting the scope of the claims of the 363 patent. For example, claim 15 line 31 of the 363 patent recites a "flexographic ink-providing means at said at least first one of said flexographic printing stations for applying a flexographic ink to said blanket cylinder to form an image;". In my opinion, this means plus function recitation can only be construed with reference to Figure 2 and the accompanying description in the 363 patent.

38. In my opinion, Figure 2 of the 363 patent is strikingly similar to Figures 2-5 of the 798 patent application which was filed on May 4, 1995, three months before the Aug. 14, 1995 filing date of the 363 patent.

39. In my opinion, the senior status of the filing date of the 798 patent application over the junior status of the filing date of the 363 patent, together with the dependence of the claims of the 363 patent upon Figure 2 of the 363 patent which is strikingly similar to Figures 2-5 of the 798 patent application, provides evidence that PRI is the inventor of the 363 patent claims.

40. Other evidence comes from the depositions taken in this case. For example, Bill Davis testified in his Sept. 20, 2000 deposition beginning on page 103 line 8 through page 106 line 18, that he had nothing to do with the retractable coater Ferris wheel mechanism illustrated in Figure 2. See his testimony below:

Page 103

8 Q. Do you, sir, take the position that the  
9 retractable coater as illustrated in figure two, all by  
10 itself and apart from the press is your invention?

11 A. That's our concept and design and it's a part  
12 of  
13 our invention.

13 Q. I said not a part of your invention, sir, I



14 asked you if it was your invention?

15 MR. PINKERTON: Object to the form.

16 Argumentative.

17 THE WITNESS: The detail of how the  
 18 anilox  
 19 roller is placed against a cylinder was left up to  
 20 Printing Research, that detail. We gave them the  
 21 concept, and the coating head was already in existence.

22 I believe the anilox rollers were already in existence,  
 23 chamber doctors were already in existence, and the  
 24 detailed mechanism of how that came into position  
 25 against  
 26 the blanket cylinder was what we asked them to  
 27 accomplish.

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1 Q. (By Mr. Harris) Sir, what's illustrated there  
 2 in figure two has the retractable member, all right,  
 3 sir?

4 A. Uh-huh.

5 Q. Is that your invention?

6 MR. PINKERTON: Object to the form.

7 Q. (By Mr. Harris) Not the only thing you  
 8 invented, but is that specific thing your invention?

9 A. That detail was left up to Printing Research.

10 Q. You didn't give them design specs or anything  
 orally on how to do that part, did you?

11 A. No, sir, no, we did not.

12 Q. So when you get down to the mechanical aspects  
13 of the retractable member and mechanism, you do not  
claim  
14 that's your invention, do you, sir?

15 MR. PINKERTON: Objection. I object to  
the  
16 form.

17 THE WITNESS: That's their apparatus.  
The  
18 invention is ours placing the roller against a  
19 flexographic plate cylinder on a blanket cylinder of a  
20 printing press. That's ours.

21 Q. (By Mr. Harris) Well, if it be an invention  
the  
22 other part of it is their invention; is that right?

23 MR. PINKERTON: Object to the form.

24 Let's see if we can clarify the question.  
25 Will you read the question back, please? I don't know

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1 what he's asking.

2 (Read back requested text)

3 MR. PINKERTON: Object to the form.

4 Calling for speculation about whether or not there is  
5 anything inventive in the retraction mechanism.

6 MR. HARRIS: About what?

7 MR. PINKERTON: Objection to the form and

8 calling for speculation.

9 MR. HARRIS: Speculation of whether or  
not

10 he has an invention?

11 MR. PINKERTON: No, not with respect to  
he

12 has an invention. He obviously has an invention.

13 MR. HARRIS: Does he? He testified  
14 today --

15 Q. (By Mr. Harris) Sir, I'm just trying to find  
16 out if there is anything separable. Is there anything  
17 there you are giving PRI or is all of it you and Jesse  
18 Williamson?

19 A. The detail of the Ferris wheel mechanism was  
at  
20 the option of Printing Research. We gave our criteria  
21 for our concept, and it was up to them to whatever  
method  
22 they needed to make a retractable coating unit  
23 interstation adaptable.

24 Q. Sir, all I was asking you was -- and I want to  
25 try again. So that Ferris wheel mechanism, as you  
stated

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1 it, if it be an invention, is the invention of Printing  
2 Research?

3 MR. PINKERTON: Objection to the form and

4 calling for speculation on this witness' part and one  
5 that he is not the appropriate person to ask about an  
6 invention.

7 THE WITNESS: That was the method of  
8 apparatus they chose to do what we asked them to do.

9 Q. (By Mr. Harris) That was the rocket you asked  
10 somebody to go to the moon, but hadn't been built yet,  
11 right, sir?

12 MR. PINKERTON: Objection to the form.  
13 Argumentative.

14 Q. (By Mr. Harris) All I'm asking you, and I'm  
15 going to ask it again, you said they chose the Ferris  
16 wheel mechanism. You had nothing to do with that  
17 specific mechanism, correct?

18 A. That is correct.

41. In my opinion, the above quotation from the transcript  
of the deposition of Mr. Davis indicates that the inventive  
contribution embodied in Fig.2 of the 363 patent belonged to  
PRI and not WPC.

Reissue Applicants' Third Supplemental Statement of Prior Art and  
Other Information

42. Counsel for PRI has asked me to look at the Statement  
of Prior Art and form opinions on the issues contained  
therein.

**Prior Art**

43. The Statement of Prior Art was filed on September 27, 2000 in the prosecution of the reissued application for the 363 patent. It references the United States patent 5,638,752, entitled "Multi-Color Offset Printing Press for Printing and In-line Coating" (752 patent). The foreign priority is based upon a German Application DE9305552 U, filed April 16, 1993.

44. WPC argues that Figure 3 and column 5, line 54 to column 6, line 10, and at least claims 2 and 4 of the 752 patent came from Jesse Williamson, one of the applicants for the 363 patent reissued application.

45. According to WPC "It is hornbook law that an inventor's own prior work will not anticipate his later invention unless that prior work is such as to constitute a [§ 102(b)] statutory bar."

46. The filing date of the 363 patent is Aug. 14, 1995. A statutory bar arises upon the publication of a piece of highly pertinent prior art prior to Aug. 14, 1994, one year before the filing date of the 363 patent.

47. In my opinion, the German patent application is high pertinent prior art against the 363 patent.

48. The German application on which the 752 patent is based was published on July 15, 1993. Reference is made to a publication, Patentblatt 113.Jhrg.Heft 28 vom 15.07.1993 (7/15/93) which contains the title, patentee and

classification for German Patent Application G 93 05 552. Also, reference is made to another publication, WILA-GMA-Heft 28 vom 15.07.1993 (7/15/93) illustrating Fig. 1 and a claim from the German Patent Application Serial No. DE 93 05 552. Both of these publications permit any member of the public to obtain a copy of the German Patent Application Serial No. 93 05 552. I am informed by counsel that evidence will be introduced concerning the availability of German patent applications in Germany, and that this will demonstrate that the German Patent Application Serial No. 93 05 552 was publicly available more than one year prior to the filing date of Aug. 14, 1995 of the 363 patent in suit.

49.

In my opinion, in order to construe the claims of the 363 patent for inventorship purposes it is necessary to review the disclosure in the German patent application in a manner that would attempt to preserve the validity some or all of the claims of the 363 patent.

II. Data or Other Information in Support of the Opinions

50.

Attached hereto as Exhibit A is a listing of all of the written data or other information relied upon in support of the opinions herein. I reserve the right to supplement this list if I learn about more information between now and trial.

III. Exhibits to be Used as a Support or Summary for the Opinions

51. At the present time, I have not created any exhibits to be used as a summary of or as support for my opinions in addition to those that are listed in Exhibit A. I reserve the right to add to the list if more information comes to my attention between now and trial.

IV. Qualifications for Expressing the Opinions in This Report, Including Publications Authored During the Last Ten or More Years

52. Attached as Exhibit B hereto is my CURRICULUM VITAE which accurately sets forth my background. It includes a listing of publications I authored within the previous ten or more years. The following is a brief summary of my qualifications, most of which are set forth in more detail in the attached Exhibit B. The opinions and expected testimony at trial are based on my education and experience as described in this report and my review of the documents identified in Exhibit A.

53. I started my corporate career as an engineer with IBM. Throughout my career I have used my undergraduate engineering courses to understand the innovative technology which was the subject matter of the patent applications that I wrote. This activity has increased my comprehension of the technology employed in the invention in this case.

54. I have been admitted to practice before the United States Patent and Trademark Office since 1960. I am the chair of the Section of Intellectual Property Law of the

American Bar Association. I received a juris doctorate degree from Georgetown University Law Center in Washington, D.C. and an engineering degree from Rutgers University. I have been a patent practitioner in corporate patent departments for over thirty-three years and for more than eighteen of those years I have been the chief patent counsel for B.F. Goodrich, and then Dresser Industries. During this patent practice, I have been involved in the evaluation of hundreds of patent disputes both prior to and during litigation. I have drafted and negotiated hundreds of patent license agreements, and developed opinions on validity, infringement and other related issues.

Testimony of Edward G. Fiorito

55. I have been qualified as a patent expert and provided trial testimony in many Federal District Court cases. I have been appointed by Federal District Judges to mediate patent infringement suits, and to hear patent infringement suits as a Special Master. I have also been appointed as an arbitrator in a number of proceedings administered by the American Arbitration Association involving intellectual property matters.
56. I have frequently lectured and presented papers on various patent law issues.
57. I was appointed by the Secretary of Commerce in 1991 to serve as an alternate member of the Advisory Commission on Patent Law Reform. I have also served as a member of The



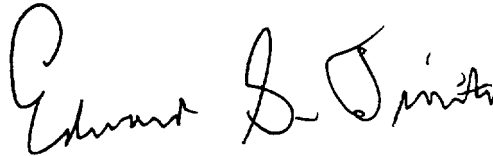
United States Delegation to the World Intellectual Property Organization Diplomatic Conference at the Hague for the purpose of harmonizing patent laws throughout the world.

V. Compensation to be Paid

58. Compensation is based upon an hourly rate for the time spent in study and testimony on this case. The rate is \$290 per hour.

VI. Listing of Other Cases in Which Testimony Was Given as an Expert, at Trial or By Deposition Within the Preceding Four Years

59. Attached hereto as Exhibit C is a listing of other cases in which I have testified as an expert, at trial or by deposition, within the preceding four years.



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Edward G. Fiorito, Esq.

THE UNIVERSITY OF CHICAGO

A

**Data or Other Information  
Considered in Forming Opinions**

**Depositions**

Scott Brown, 8/10/00  
Bill Davis, 9/20/00  
Ronald Rendleman, 9/28/00  
Steve Garner, 8/11/00  
Howard De Moore 10/17/00  
John W. Bird, 9/12/00  
Steven Baker, 8/9/00  
Jesse Speight Williamson, 10/18/00

**Expert Reports**

Professor William Stephen Mott, 10/4/00  
Warren B. Kice, 10/5/00  
Bernarr R. Pravel, 10/5/00

**Pleadings**

Amended Scheduling Order, Filed 9/8/00, Entered on Docket  
9/11/00  
Defendants' Answer, 6/10/99  
First Amended Original Complaint, 9/11/00  
Counterclaims by Defendants, 10/11/00

**Patents, Patent Applications, and Prosecution Histories**

5,630,363  
5,638,752  
German Patent Application Serial No. DE9305552 filed  
4/16/93, published 7/15/93  
European Patent EP 0 620 115 B1, and English translation  
thereof  
Certification (Bescheinigung) of copy of German Patent  
Application `552  
Patent-und Gebrauchsmusterrolle for Application DE: 93 05  
552.8  
Patentblatt 113.Jhrg.Heft 28 vom 7/15/93 with title,  
patentee and classification for German Patent  
Application G 93 05 5528  
Title page for Gebrauchsmuster Application No. G 93 05 5528  
filed 4/16/93 and published in the Patentblatt 7/15/93  
WILA-GMA-Heft 38 vom 7/15/93 illustrating Fig. 1 and a claim  
from the German Patent Application Serial No. DE 93 05  
552  
Patent Applications Serial No. 08/435,798, filed 5/4/95  
Prosecution History of U.S. Patent Application Serial number  
08/435,798  
Prosecution History of Williamson's U.S. Patent No.  
5,630,363  
In re Reissue Application of Bill L. Davis and Jesse S.  
Williamson, for Reissue of U.S. Patent 5,630,363  
- Reissue Applicants' Third Supplemental Statement of

- Prior Art and Other Information
- Reissue Applicants' First Submissions of Deposition Testimony and Submission of Supplemental Declarations, 10/13/00
- Joint Declaration (1) Under 37 C.F.R. §1.131 and (2) Pertaining to Derivation by DeMoore and Printing Research, Inc. of Reissue Applicants' Invention, 6/30/00
- Joint Declaration Submitted Under 37 C.F.R. §1.57(b), 5/5/99, W000768-800
- Declaration of Steven Baker, 11/3/99, W001248-1252
- Declaration of Scott Brown, 12/30/99, W001253-1298
- Declaration of Steve M. Garner, 4/6/00, W001299-1305
- Declaration of John W. Bird, 12/9/99, W000867-879
- Supplemental Declaration of John W. Bird, 4/3/00, W000880-930
- Supplemental Declaration of Steven Baker, 10/5/00
- Supplemental Joint Reissue Declaration, 3/9/00, W00840-866

#### Exhibits

- 1 First Amended Original Complaint, 9/11/00
- 4 Letter from Howard DeMoore to Jerry Williamson, 2/2/00, PRI 00528-529
- 5 Statements from Glaser, Griggs & Schwartz and payment by Printing Research, Inc., including PRI 01642-1667
- 6 Statements from Glaser, Griggs & Schwartz and payment by Printing Research, Inc., including PRI 01670-1685
- 7 Statements from Glaser, Griggs & Schwartz and payment by Printing Research, Inc., including PRI 01687-1702
- 8 U.S. Patent 6,082,257
- 9 In re patent application of Ronald M. Rendleman, et al for Retractable Inking/Coating Apparatus Having Ferris Movement Between Printing Units, 5/4/95, W001354-1413
- 10 Weather Underground: History, Fast Forecast, Hey You! History for Dallas/Ft Worth, Texas 7/7/94
- 11 Second Supplemental Declaration of John W. Bird, 10/5/00, 7 pages including W002705-2706
- 14 Letter from Jerry Williamson to Howard DeMoore, Re: WPC Patent, 2/11/99, PRI 00445
- 15 PRI Super Blue Technology Key Account Activity Report, Jan. 2000, Manager: Steve Garner, PRI 00488
- 17 Time spent on Williamson Coater Project in 1995, PRI 00345-347
- 18 U.S. Patent 4,402,267, Sep. 6, 1983, DeMoore
- 19 Hubbard, Thurman, Turner & Tucker vs. Howard DeMoore d/b/a Printing Research Development Company, Plaintiff's Original Petition, Jun. 27, 198[5]

T-11-99-364759

**Drawings**

PRI 01137-44

PRI 01122

PRI 00944

PRI 01123-26

PRI 00004-13

01137-44  
01122  
00944  
01123-26  
00004-13

FOR INFORMATION

**B**

**EDWARD G. FIORITO**

**CURRICULUM VITAE**

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**Tel: 972-380-1070**

**FAX: 972-380-9154**

**E-Mail: IPConsulting@msn.com**

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A specialist in patent and trademark law and the transfer and protection of inventions, marks and other intellectual property. Consultant, expert witness, special master, arbitrator, and mediator regarding the appraisal of patent and trademark rights, the establishment of damages and reasonable royalties, the procurement and enforcement of patents, trademarks and other proprietary rights, and the scope and validity of patent claims.

**EDUCATION**

Juris Doctorate Degree, Georgetown University Law Center, Washington, D.C. 1963.

B.S. Electrical Engineering, Rutgers University, New Brunswick, New Jersey 1958.

Honorary Societies: Tau Beta Pi (Engineering), Pi Mu Epsilon (Mathematics), and Eta Kappa Nu (Electrical Engineering).

**PROFESSIONAL EXPERIENCE**

IBM Corp., 1958-1969. While at the IBM headquarters in Armonk, New York as a member of a licensing group composed of patent lawyers and businessmen, negotiated and prepared hundreds of license agreements, both into and out of IBM and both royalty-bearing agreements and cross-licenses. There were frequent assessments of the value of patent rights and the establishment of royalty rates for a full range of computer products. In 1969 prepared the first Program Products License Agreement for marketing computer software separate from hardware.

While at the IBM Research Center in Yorktown Heights, New York, prepared and prosecuted patent applications on laser devices, semiconductor circuits, character recognition systems, adaptive learning systems and data communication systems.

Assignments at the IBM Patent Training Center located next to the United States Patent and Trademark Office included frequent interviews with Examiners to overcome rejections of patent claims, novelty and infringement searches in the USPTO search room and unofficial Examiners art collections, and preparation and prosecution of patent applications.

Initial employment began at the IBM Military Products Division in Owego, New York as an electrical engineer assigned to the bombing and navigation system for the B-52 Bomber.

Energy Conversion Devices, Inc., 1969-1972, Troy, Michigan. As Vice President Patents and Commercial Relations conducted many negotiations for the sale of technology and patent rights. Patents and know-how were assessed for the purpose of transferring rights to affiliated companies starting up new businesses, and to other parties for the purpose of commercializing new technologies. Various fields of use were established and values determined for the future use of technology and patents. Payments were made through a variety of financial arrangements including running royalties, lump sum payments, and equity in the venture commercializing the patents and technologies.

Prepared patent applications and supervised other attorneys in the procurement of patents on semiconductor material properties, manufacture of integrated circuits, copier systems, imaging systems and digital disk storage systems using laser recording and reading techniques.

Burroughs Corporation (Now Unisys Corp.), 1972-1975, Detroit, Michigan. As Patent Manager in the Corporate Headquarters negotiated license agreements in a wide range of computer technology. Prepared software licenses for the marketing of software products. Supervised patent litigation and resolved disputes, including litigation involving automated bank teller machines. Authored an amicus curiae brief filed in the Supreme Court of the United States on the issue of the patentability of computer software, *Gottschalk v. Benson*, 409 U.S. 63 (1972). Twenty years later participated as a patent law expert on the same issue in *Arrhythmia Research Technology, Inc. v. Corazonix Corporation*, 22 P.Q.2d 1033 (Fed. Cir. 1992).

Managed a number of decentralized patent departments with particular emphasis on quality control of patent application preparation and prosecution.

Prepared infringement opinions construing the scope of claims in adversely held patents, and counseling management on the redesign of products to avoid infringement.

B. F. Goodrich Company, 1975-1983, Akron, Ohio. As General Patent Counsel conducted worldwide licensing program for tire and chemical products. Established royalty rates for both domestic and worldwide markets with both equity partners and unrelated licensees. Was a member of the Board of Directors of a patent holding company based in Luxembourg and responsible for establishing a licensing program primarily based in Europe.

Conducted infringement and validity studies involving the patents of Goodrich and its competitors, together with the assessment of potential damage awards in patent litigation with the objective of settlement by licensing prior to or during litigation. Managed Patent Department of fourteen patent and trademark attorneys including two licensing counsel working full time negotiating and drafting license agreements, and one trademark counsel working full time on the procurement and enforcement of the company's trademarks and the avoidance of infringement of the marks of others.

Technology included polyvinyl chloride processes, specialty polymers, tires, truck anti-lock braking systems, and aircraft carbon brakes and deicers.

Dresser Industries, Inc., 1983-1993, Dallas, Texas. As Director of Patents and Licensing, negotiated the settlement of many patent legal disputes resulting in lump sum payments and running royalties. Negotiations have included establishing the value of patents and know-how through negotiation in the United States and other countries, including Japan and The Peoples Republic of China. Participated as in-house counsel in the remand of the largest judgement in the history of the



patent system at that time, over \$131 million, *Hughes Tool Co. v. Dresser Industries, Inc.* (N.D. Tex. 1985).

Responsible for procurement of patent portfolio, and for opinions on validity, scope and enforceability of patents relating to a wide range of products and services utilized in oil and gas exploration, drilling and production, gas transmission, conversion of oil, gas, and coal into value-added energy forms, trucks and vehicles utilized in mining, earth moving, and road maintenance activities, refractory products used in steel industry, valves, instruments, pumps, compressors, engines, turbines and hand tools.

Responsible for the procurement and enforcement of trademarks and avoiding infringement of the trademarks of others.

### **Special Master, Testifying Expert, Arbitrator, Mediator, and Consultant**

**1986- present**

**Special Master** - Appointed by Federal District Court Judges to hear patent cases as a Special Master.

**Litigation** - Testifying expert in the intellectual property field providing opinion testimony at trial on issues involving damages, reasonable royalties, claim construction, United States Patent and Trademark Office procedures, patent validity, infringement and enforceability, trade secrets, design patents, trademarks, and product configuration marks. Provided trial testimony in over thirty cases, including eleven jury trials. Provided reasonable royalty testimony for the patent owner in the *Haworth v. Steelcase* litigation which ended in 1997 with the second largest patent infringement judgement in U.S. history at that time, \$211.5 million. Products in litigation involved integrated circuits, oil field tools, medical apparatus, cattle health systems, paper-making machines, printing presses, voice mail systems, sonar systems, programming and software inventions, conveyor systems, modular office furniture, oil spill cleanup systems, fabric bulk containers, cable TV systems, consumer TV features, recycle furnace, artificial body parts, image setting software, printer graphics, speed control systems, amorphous silicon films, liquid crystal displays, micro-processor with pipeline, laser eye surgery, directional drilling, and genetically altered corn seed.

**Alternate Dispute Resolution** - As a member of the American Arbitration Association Panel of Arbitrators and Mediators received training in both arbitration and mediation proceedings, and conducted arbitration hearings.

Appointed by Federal District Court Judges to conduct meditations in patent suits.

**Neutral Evaluator** - Appointed by parties to evaluate and administer terms and conditions in license agreement.

**Consultant** - Provide services to Dresser Industries, Inc. and a number of its divested divisions and to other clients in a wide variety of intellectual property matters including licensing, infringement opinions, patent and trademark prosecution, copyrights and trade secrets.

### **PUBLICATIONS, LECTURES AND WORKSHOPS**

"Litigate or Arbitrate - Comparative Cost Analysis", Fourth International Symposium on Reduction of Patent Cost, Co-hosted by The American Intellectual Property Law Association (AIPLA) and La Fédération Internationale des Conseils en Propriété Industrielle (FICPI), July 20, 1999, The Hague, Netherlands

Guest lecturer at Southern Methodist University, law student, and law and economics classes, 1993 to date, Dallas Texas

- "Use & Abuse of Special Masters", Intellectual Property Law Section of the Texas Bar Association, March 6, 1999, Austin, Texas
- "The Use of Experts in IP Litigation", Intellectual Property Law Section Of the Dallas Bar Association, Jan. 29, 1999, Dallas Texas
- "An Introduction to the U.S. Patent Laws Which Differ From Canadian Patent Law", American Bar Association, Section of Intellectual Property Law, August 1, 1998, Toronto, Canada
- "Special Masters", American Intellectual Property Law Association, Federal Litigation Committee Program, Panel Discussion April 23, 1998, Minneapolis, Minnesota
- "Survey on Use of Experts", American Bar Association IPL Newsletter, Volume 15, Number 4, Summer 1997.
- "Damages in Patent Infringement Cases"; Intellectual Property Law Section Dallas Bar Association, February 28, 1997, Dallas Texas.
- "Current Expert Witness Disclosure Under The New Discovery Rule 26 and Use of Experts", ABA Section of Intellectual Property Law, Spring CLE on "Patent, Trademark and Copyright Law; Litigation and Corporate Practice", April 11, 1996, Arlington, Virginia.
- "Controlling Intellectual Property Litigation Costs of Trial Counsel", Corporate Counsel's Guide to Litigation Management, published by Business Laws, Inc., September, 1995.
- Patent Litigation Program Moderator for the American Bar Association, Section of Intellectual Property Law, CLE Program at the Summer Conference, June 22, 1995, Colorado Springs, Colorado.
- Patent Program Moderator for the American Bar Association, Section of Intellectual Property Law, Spring CLE on "Patent, Trademark and Copyright Law: Litigation and Corporate Practice", April 8, 1994, Arlington, Virginia.
- "Highlights of Selected Recommendations of the Advisory Commission on Patent Law Reform", published in the Texas Intellectual Property Law Journal, Vol. 1, No. 1, Winter 1992, pages 11-29.
- "Patent Law Reform -- Summary of Advisory Commission Recommendations" presented at the 8th Annual Intellectual Property Law Institute, Houston Intellectual Property Law Association, Galveston, Texas, September 26, 1992.
- "Analysis of Selected Recommendations of Advisory Commission on Patent Law Reform", published in the BNA's Patent, Trademark and Copyright Journal, Vol. 44, No. 1097, September 17, 1992, pages 502-511.
- "Advisory Commission on Patent Law Reform - Status of Recommendations" presented at the State Bar of Texas Annual Meeting, Intellectual Property Law Section, Corpus Christi, Texas, June 26, 1992.
- "Mediation Demonstration", on patent damages conducted at the Twenty-Ninth Annual Institute on Patent Law, The Southwestern Legal Foundation, Dallas, Texas, November 14, 1992.
- "Controlling Intellectual Property Litigation Costs of Trial Counsel", presented at the 7th Annual Intellectual Property Law Institute, Houston Intellectual Property Law Association, Galveston, Texas, October 5, 1991.
- "The WIPO 'Basic Proposal' for Harmonization of Patent Laws Viewed from the U.S. Practitioner's Point of View", published in the AIPLA Quarterly Journal, June 1991, Volume 19, No. 1, pages 24-58.

"The 'Basic Proposal' for Harmonization of U.S. and Worldwide Patent Laws Submitted by WIPO", published in the Journal of the Patent and Trademark Office Society, February 1991, Volume 73, No. 2, pages 83-109.

"WIPO Experts Make Progress on Patent Harmonization Draft", published in the BNA's Patent, Trademark and Copyright Journal, Vol. 41, No. 1013, January 10, 1991, pages 231-241.

"Harmonization of Patent Laws -- Status Report", presented at the Twenty-Eighth Institute on Patent Law, the Southwestern Legal Foundation, Dallas, Texas, December 6, 1990.

"Harmonization of Patent Laws", a panel discussion sponsored by the Section of Patent, Trademark and Copyright Law of the American Bar Association Annual Meeting in Honolulu, Hawaii, 1989.

"Patent Damages in the Hughes v. Dresser Drill Bit Case at the Federal Circuit and Remand to the District Court" presented at the Intellectual Property Law State Bar of Texas Professional Development Program, San Antonio, Texas, February 1989.

"Corporate Management of Intellectual Property Litigation", presented at the Intellectual Property Law Spring Institute of the State Bar of Texas, San Antonio, Texas, February 1987.

"Damages in Patent Litigation" presented at the Dallas-Fort Worth Patent Law Association, Dallas, Texas 1986.

Expert Witness in a Trial Demonstration: "The Patent Owner's Damages Case", conducted by the Intellectual Properties Litigation Committee of the Section of Litigation of the American Bar Association at the 1986 Annual Meeting, New York, New York, 1986.

"Trade Secrets/The Corporate Experience", presented at a conference sponsored by the Institute for International Research, on How to Keep Trade Secrets and Enforce the Employee Non-Competition Agreement and Other Safeguards, Dallas, Texas 1984.

Trade Secrets: Moderator of a workshop presented at Association of Corporate Patent Counsel, Marco Island, Florida, January 26, 1983.

"Trade Secret Provisions in Employee Contracts", presented at a seminar entitled "Sorting Out the Ownership In Intellectual Property: Practical Counseling and Legal Representation", presented at the Section of Patent, Trademark and Copyright Law of the American Bar Association annual meeting in Honolulu, Hawaii, 1980.

#### PROGRAM CHAIRMAN

Continuing Legal Education Program for the Intellectual Property Law Section of the Texas Bar Association for the 1990 Annual Meeting in Dallas.

Continuing Legal Educational Program for the Section of Intellectual Property Law of the American Bar Association for the 1987 Annual Meeting in San Francisco.

Law, Science and Technology in Health Risk Regulation II sponsored by the Section of Science and Technology of the American Bar Association in Washington, D. C., 1981.

Law, Science and Technology in Health Risk Regulation, A National Institute of the American Bar Association in Washington, D. C., 1979.

#### ADMISSIONS TO PRACTICE

|                                                         |      |
|---------------------------------------------------------|------|
| Supreme Court of Texas (Active)                         | 1984 |
| U. S. Court of Appeals for the Federal Circuit (Active) | 1982 |
| Supreme Court of Ohio (Inactive)                        | 1975 |
| Michigan Supreme Court (Inactive)                       | 1970 |

|                                                    |      |
|----------------------------------------------------|------|
| New York Court of Appeals (Active)                 | 1964 |
| Virginia Supreme Court of Appeals (Associate)      | 1963 |
| United States Patent and Trademark Office (Active) | 1960 |

### PROFESSIONAL ACTIVITIES

Testified at hearings before the United States Patent and Trademark Office on efforts to harmonize the patent laws of the world and the consequent changes to United States patent law, October 8, 1993.

Member of the United States Delegation to the World Intellectual Property Organization Diplomatic Conference for the Conclusion of a Treaty Supplementing the Paris Convention as far as Patents are Concerned, The Hague, June 3, 1991

The Secretary of Commerce Advisory Commission on Patent Law Reform  
Alternate Member, 1991-1992

American Bar Association

Section of Intellectual Property Law: Chairman 2000-2001; Financial Officer 1992-95;  
Council Member 1986-89;

Chairman, Expert Witness Committee 1995-1998.

Section of Science and Technology: Chairman 1984-1985

Texas Bar Association, Chairman of the Intellectual Property Law Section, 1990-1991

International Patent and Trademark Association, U. S. Group of Association

International pour la Protection de la Propriete Industrielle (AIPPI) Member of Executive Board, 1990-current member

Co-Chairman, Experts in Patent Disputes - Role and Function, AIPPI Working Committee Q136, 1995-1998

Co-Chairman, Q122 Custom Seizure, AIPPI Special Committee, 1995

Delegate of U.S. Group to AIPPI World Congress, Montreal 1995, and Rio de Janeiro 1998

American Arbitration Association, National Panel of Patent Arbitrators, 1989 - current member

Association of Corporate Patent Counsel, Member of Executive Committee, 1982-1983

Intellectual Property Owners, Inc., Co-Chairman, Patent Costs and Economics Benefits Committee 1995-present

Member of the Board of Advisors of the Law Department Management Publications of Business Laws, Inc., 1990-1998

American Intellectual Property Law Association

Chairman Expert Witness Subcommittee of the Federal Litigation Committee, 1996-1997

Chairman Panel Listing Subcommittee of the ADR Committee, 1990-1992

### OTHER PROFESSIONAL AND HONORARY MEMBERSHIPS

The College of the State Bar of Texas 1990- current member

Dallas-Fort Worth Patent Law Association 1983 - Current Member

The Institute of Electrical and Electronics Engineers, Life Member

Member of the Intellectual Property Committee, 1992- current member

Marquis Who's Who in America 1986 - Current Member

Marquis Who's Who in American Law 1985 - Current Member

### Special Master Judge

Newell Industries, Inc. v. Helmut Koehler and Lindemann Recycling Equipment, Inc.

District Court, 166th Judicial District, Bexar County, Texas

No. 96-CI-04861

Shredder

ProSoft Corporation v. Advanced Productivity Software, Inc.

U.S. District Court for the Northern District of Texas, Dallas Division

Civil Action No. 3:97-CV-145-X

Windowed Computer Display

Wayne K. Pfaff v. Wells Electronics, Inc.

U.S. District Court for the Northern District of Texas, Dallas Division

Civil Action No. 3:91-CV-1542-H (*cert. granted*)

Mounting for Leadless Chip Carrier

**Arbitrator**

WWW.WorldLink Corp. vs. John Scobey, Carl Faust, Cambridge Consulting - Dallas, Texas

American Arbitration Association, Arbitrator

Case No. 71 E 117 00118 00

Internet Home Page Software

Neeco Industries, Inc. vs. Kvaerner National, Inc.

American Arbitration Association, Houston, Texas, Arbitrator

Case No. 70-181-00387-99

Oilfield Gate Valve

Dr. Pepper/Seven Up, Inc. v. The Descartes Systems Group, Inc.

The American Arbitration Association, New York International Center for Dispute Resolution, Dallas, Texas

Case No. 50 T 117 00034 99, Appointed Arbitrator

Year 2000 Compliant Software

Summa Rx Laboratories, Inc. v. J.B. Williams Company, Inc.

The American Arbitration Association

Matter No. 71-133-00410 98, Appointed Arbitrator

Drug and Dietary Supplements

Dentsply International Inc. and Tulsa Dental Products, Inc. v. Moyco Technologies, Inc.

American Arbitration Association, Dallas Texas Region

Case No. 71 133 00305 98

Endodontic Instrument

James G.J. Crow, Margaret Needham Crow, Murray D'Almeida, Kevin B. Cook, and Anthony

Vallone v. Wellness International Network, Ltd., WIN Network, Inc., Ralph Oats, Individually,

Howard Oats, Individually, Ivan C. "Nick" Camp IV, Individually, Phillip Sindler, Individually, and

Michael Matthews, Individually

American Arbitration Association, Dallas Texas Region

Case No. 71 181 00049 98

Nutritional Products

Transmedical Corporation v. Microtek Medical, Inc.

American Arbitration Association, Dallas Texas Region

Case No. 71 133 00211 94

Surgical Light Handle

Sprint Communications Company, L.P. v. World Cup USA 1994, Inc. - Dallas, Texas

American Arbitration Association, Dallas Texas Region

Case No. 71 133 00178 94

Pandel Instruments, Inc. v. Kaneb Metering Corp. and Kaneb Services, Inc.

American Arbitration Association, Dallas Texas Region

Case No. 71 133 00129 92

Leak Detection Equipment

C.F.C. Reclamation & Recycling Service, Inc. v. Gartech Refrigerant

Reclamation Center, Inc.

American Arbitration Association, Dallas Texas Region

Case No. 71 199 1111 90

Refrigerant Reclamation

Medmax, Inc. -and- Medmax, Inc.

|                                                                                 |                                           |
|---------------------------------------------------------------------------------|-------------------------------------------|
| American Arbitration Association, Dallas Texas Region                           |                                           |
| Case No. 71 199 00195 91                                                        | Electronic Stethoscope                    |
| Act, Inc. v. Sheldon M. Early                                                   |                                           |
| American Arbitration Association, Dallas Texas Region                           |                                           |
| Case No. 71 197 00344 97                                                        | Testing                                   |
| <b><u>Mediator</u></b>                                                          |                                           |
| Steven R. Heuer and Victor R. Reynolds v. Amoco Oil Company                     |                                           |
| District Court, City and County of Denver, Colorado                             |                                           |
| Civil Action No. 96CV-5419                                                      | Oil Recovery From Waste Sludge            |
| Ultrak, Inc. v. Kustom Signals, Inc.                                            |                                           |
| U.S. District Court for the Northern District of Texas, Dallas Division         |                                           |
| Civil Action No. 3:96-CV-1569-H                                                 | Video Recorder for Patrol Car             |
| Quality Steel Foundries, Ltd. v. Pippins Innovations, Inc.                      |                                           |
| U.S. District Court for the Northern District of Texas, Dallas Division         |                                           |
| Civil Action No. 3:96-CV-0920-H                                                 | Tooth Assembly for Excavating Machine     |
| Solorax Corporation v. Advanced Photovoltaic Systems, Inc.                      |                                           |
| U.S. District Court for the District of Delaware                                |                                           |
| Civil Action No. 93-229 (JJF)                                                   | Amorphous Silicon Photovoltaic Films      |
| Ann de Wees T. Allen v. Omnitrition International, Inc.                         |                                           |
| U.S. District Court for the Northern District of Texas, Dallas Division         |                                           |
| Civil Action No. 3:96-CV-1622-H                                                 | Weight-Reducing Coffee                    |
| Ultrak, Inc. v. Radio Engineering Industries, Inc.                              |                                           |
| U.S. District Court for the Northern District of Texas, Dallas Division         |                                           |
| Civil Action No. 3:95-CV-3043-H                                                 | Video Camera Housing                      |
| Specialty Rental Tools & Supply, Inc. v. Boyd's Bit Service, Inc., et al        |                                           |
| U.S. District Court for the Southern District of Texas, Houston Division        |                                           |
| Civil Action No. H-94-1315                                                      | Oilfield Tools                            |
| Clifford J. Ott v. Kerley AG, Incorporated                                      |                                           |
| U.S. District Court for the Southern District of Texas, Galveston Division      |                                           |
| Civil Action No. G-93-502                                                       | Chemical Process for Ammonium Thiosulfate |
| Datapoint Corporation v. Picturatel Corporation                                 |                                           |
| U.S. District Court for the Northern District of Texas, Dallas Division         |                                           |
| Civil Action No. 3-93-CV-2381-D                                                 | Video Teleconferencing                    |
| Datapoint Corporation v. Compression Labs, Incorporated                         |                                           |
| U.S. District Court for the Northern District of Texas, Dallas Division         |                                           |
| Civil Action No. 3:93-CV-2522-D                                                 | Video Teleconferencing                    |
| Texas Aluminum Industries, Inc. v. Structural Panels, Inc.                      |                                           |
| Mediation for U.S. District Court, Southern District of Texas, Houston Division |                                           |
| Civil Action No. H 92 888                                                       | Building Panel Interlock                  |
| <b><u>Neutral Evaluator</u></b>                                                 |                                           |
| Agreement Between The Dial Corporation and S. C. Johnson & Son, Inc.            |                                           |
| Appointed Neutral Evaluator                                                     | RENUZIT Air Freshener                     |

| Information of 1 participant at an age |      | Mean |      | SD  |     |
|----------------------------------------|------|------|------|-----|-----|
| Age                                    | Sex  | Age  | Sex  | Age | Sex |
| 12                                     | Male | 12.0 | Male | 0.5 | 0.5 |
| 13                                     | Male | 13.0 | Male | 0.5 | 0.5 |
| 14                                     | Male | 14.0 | Male | 0.5 | 0.5 |
| 15                                     | Male | 15.0 | Male | 0.5 | 0.5 |
| 16                                     | Male | 16.0 | Male | 0.5 | 0.5 |
| 17                                     | Male | 17.0 | Male | 0.5 | 0.5 |
| 18                                     | Male | 18.0 | Male | 0.5 | 0.5 |
| 19                                     | Male | 19.0 | Male | 0.5 | 0.5 |
| 20                                     | Male | 20.0 | Male | 0.5 | 0.5 |
| 21                                     | Male | 21.0 | Male | 0.5 | 0.5 |
| 22                                     | Male | 22.0 | Male | 0.5 | 0.5 |
| 23                                     | Male | 23.0 | Male | 0.5 | 0.5 |
| 24                                     | Male | 24.0 | Male | 0.5 | 0.5 |
| 25                                     | Male | 25.0 | Male | 0.5 | 0.5 |
| 26                                     | Male | 26.0 | Male | 0.5 | 0.5 |
| 27                                     | Male | 27.0 | Male | 0.5 | 0.5 |
| 28                                     | Male | 28.0 | Male | 0.5 | 0.5 |
| 29                                     | Male | 29.0 | Male | 0.5 | 0.5 |
| 30                                     | Male | 30.0 | Male | 0.5 | 0.5 |
| 31                                     | Male | 31.0 | Male | 0.5 | 0.5 |
| 32                                     | Male | 32.0 | Male | 0.5 | 0.5 |
| 33                                     | Male | 33.0 | Male | 0.5 | 0.5 |
| 34                                     | Male | 34.0 | Male | 0.5 | 0.5 |
| 35                                     | Male | 35.0 | Male | 0.5 | 0.5 |
| 36                                     | Male | 36.0 | Male | 0.5 | 0.5 |
| 37                                     | Male | 37.0 | Male | 0.5 | 0.5 |
| 38                                     | Male | 38.0 | Male | 0.5 | 0.5 |
| 39                                     | Male | 39.0 | Male | 0.5 | 0.5 |
| 40                                     | Male | 40.0 | Male | 0.5 | 0.5 |
| 41                                     | Male | 41.0 | Male | 0.5 | 0.5 |
| 42                                     | Male | 42.0 | Male | 0.5 | 0.5 |
| 43                                     | Male | 43.0 | Male | 0.5 | 0.5 |
| 44                                     | Male | 44.0 | Male | 0.5 | 0.5 |
| 45                                     | Male | 45.0 | Male | 0.5 | 0.5 |
| 46                                     | Male | 46.0 | Male | 0.5 | 0.5 |
| 47                                     | Male | 47.0 | Male | 0.5 | 0.5 |
| 48                                     | Male | 48.0 | Male | 0.5 | 0.5 |
| 49                                     | Male | 49.0 | Male | 0.5 | 0.5 |
| 50                                     | Male | 50.0 | Male | 0.5 | 0.5 |
| 51                                     | Male | 51.0 | Male | 0.5 | 0.5 |
| 52                                     | Male | 52.0 | Male | 0.5 | 0.5 |
| 53                                     | Male | 53.0 | Male | 0.5 | 0.5 |
| 54                                     | Male | 54.0 | Male | 0.5 | 0.5 |
| 55                                     | Male | 55.0 | Male | 0.5 | 0.5 |
| 56                                     | Male | 56.0 | Male | 0.5 | 0.5 |
| 57                                     | Male | 57.0 | Male | 0.5 | 0.5 |
| 58                                     | Male | 58.0 | Male | 0.5 | 0.5 |
| 59                                     | Male | 59.0 | Male | 0.5 | 0.5 |
| 60                                     | Male | 60.0 | Male | 0.5 | 0.5 |
| 61                                     | Male | 61.0 | Male | 0.5 | 0.5 |
| 62                                     | Male | 62.0 | Male | 0.5 | 0.5 |
| 63                                     | Male | 63.0 | Male | 0.5 | 0.5 |
| 64                                     | Male | 64.0 | Male | 0.5 | 0.5 |
| 65                                     | Male | 65.0 | Male | 0.5 | 0.5 |
| 66                                     | Male | 66.0 | Male | 0.5 | 0.5 |
| 67                                     | Male | 67.0 | Male | 0.5 | 0.5 |
| 68                                     | Male | 68.0 | Male | 0.5 | 0.5 |
| 69                                     | Male | 69.0 | Male | 0.5 | 0.5 |
| 70                                     | Male | 70.0 | Male | 0.5 | 0.5 |
| 71                                     | Male | 71.0 | Male | 0.5 | 0.5 |
| 72                                     | Male | 72.0 | Male | 0.5 | 0.5 |
| 73                                     | Male | 73.0 | Male | 0.5 | 0.5 |
| 74                                     | Male | 74.0 | Male | 0.5 | 0.5 |
| 75                                     | Male | 75.0 | Male | 0.5 | 0.5 |
| 76                                     | Male | 76.0 | Male | 0.5 | 0.5 |
| 77                                     | Male | 77.0 | Male | 0.5 | 0.5 |
| 78                                     | Male | 78.0 | Male | 0.5 | 0.5 |
| 79                                     | Male | 79.0 | Male | 0.5 | 0.5 |
| 80                                     | Male | 80.0 | Male | 0.5 | 0.5 |
| 81                                     | Male | 81.0 | Male | 0.5 | 0.5 |

C

Listing Of All Cases In Which Testimony As An Expert  
Was Given At Trial Or By Deposition Within The Preceding Four Years

Technical Chemicals and Products, Inc. v. American Diagnostics, Inc. and American Health  
Scan, International Medical Associates, Inc. ...

United States District Court, Florida

Skin Test Patch for Diabetics

Pioneer Hi-Bred International, Inc. v. Monsanto Company

United States District Court of Eastern District of Missouri, Deposition Damages

Case No. 4:97CV1609ERW

Genetically Engineering Bt Corn

National Instruments Corporation v. PPT Vision, Inc.

United States District Court for the Western District of Texas, Austin Division,

Deposition April 12, 2000, Deposition, Liability and Damages

Civil Action No. A 99 CA 187 JN

Visual Programming

The Quigley Corporation v. Gum Tech, Incorporated, et al.

United States District Court for the Eastern District of Pennsylvania, Preliminary

Injunction Hearing, Liability

Civil Action No. 99-CV-5577

Zinc Lozenge

Outland Sports, Inc. v. Game Country, Inc.

United States District Court for the Western District of Texas San Antonio Division

Civil Action No. SA-99-CA152-OG Deposition -Liability and Damages

Deer Feeder

Micro Chemical, Inc. v. Lextron, Inc.

U.S. District Court for the Northern District of Texas, Lubbock Division

Civil Action No. 2-98-CV-300, Deposition - Liability and Damages

Cattle Medical Health Computer

Fike Corporation v. The United States

In the United States Court of Federal Claims

No. 95-58C, Deposition and Trial - Damages

Rupture Disk for Rocket Motor

Arthrocare Corp. v. Ethicon, Inc., et al

United States District Court for the Northern District of California

Civil Action No. C-98-00609 WHO, Deposition - Damages

Surgical Instrument

Yamaichi Electrics Co. Ltd. and Yamaichi Electronics USA, Inc. v. Enplas Corporation, Enplas  
Tech (U.S.A.), Inc. and Tesco International, Inc.,

United States District Court for the Northern District of California San Francisco  
Division



No. 97-4388MJJ, Deposition testimony – willfulness

Integrated Circuit Socket

ASIF, a California corporation vs. Signtech USA, Ltd./Signtech USA, Inc.,

American Arbitration Association

Case No. 74-E-133-0021-98, Testimony at hearing - Liability

Inkjet Printer

Rhone-Poulenc Agrochimie, S.A. v. Monsanto Company, and Dekalb Genetics Corporation

United States District Court for the Middle District of North Carolina

Civil Action No. 1:97CV01138, Deposition-Liability, Damages and Inventorship, Trial-Liability and Inventorship

Glyphosate Resistant Corn

Benchmark Entertainment L.C. v. Seidel Amusement and Machine Co.

United States District Court for The Southern District of Florida, Northern District

Civil Action No. 97-6390-Civ-ZLOCH, Deposition-Liability and Damages Trial-Liability

Coin Operated Amusement Device

Emerson Electric Co. v. Quorum International, Inc.

U.S. District Court, St. Louis

Civil Action No. 4:94CV1291 CDP, Deposition - Liability

Ceiling Fan Speed Control

Hidalgo, et al. v. Arterial Vascular Engineering, Inc., et al.

298th Judicial District Court for Dallas County, Texas

Cause No. 96-05353-M, Deposition - Liability

Medical Stent for Heart

Research Corporation Technologies v Hewlett-Packard Company

U.S. District Court, District of Arizona

Civil Action No. 95-40-TUC-JMR, Deposition - Damages

System for Half Tone Rendering of Gray Scale Image for Printing

Semiconductor Energy Laboratory Co., Ltd., v. Samsung Electronics Co., Ltd., Samsung

Electronics America, Inc., and Samsung Semiconductor, Inc.

United States District Court , Eastern District of Virginia, Alexandria Division

Civil Action No. 96-1460-A, Deposition - Damages

Active Matrix Display for Laptops

Mycogen Plant Science, Inc.; and Agrigenetics, Inc. v. Monsanto Company, DeKalb Genetics Corporation, and Delta & Pine Land Company

United States District Court for the District of Delaware

Civil Action No. 96-505 RRM, Deposition and Trial - Damages

Genetic Engineered Plants

The L.D. Kichler Co. v. Davoil, Inc., d/b/a Quorum International

U.S. District Court of Ohio, Eastern Division

Civil Action No. 1:96CV 2022, Deposition - Liability

Lighting Fixture Designs

Horst Buckner v. Facial Concepts, Inc. and William F. Hellings

District Court of Dallas County, Texas, M-298 to th Judicial District

Civil Action No. 96-05764, Deposition - Liability

Oral Appliance for Burn Patients

Wang Laboratories, Inc. v. Filenet Corporation

Filenet Corporation v. Wang Laboratories, Inc.

U.S. District Court for the District of Massachusetts

Civil Action No. 94-12141 RCL, Deposition - Damages

Office Automation With Image Management

Ampex Corporation and Ampex International, S.A. v. Mitsubishi Electric Corporation,

Mitsubishi Electric America, Inc., Mitsubishi Consumer Electronics America, Inc., Mitsubishi

Electronics America, Inc., and Mitsubishi Electric Sales America, Inc.

U.S. District Court for the District of Delaware

Civil Action No. 95-582 (RRM), Deposition and Trial - Damages

Video-tape Recorder Heads and Picture-in-Picture TV Display

Messagephone, Inc. v. AT&T Corporation

U.S. District Court for the Northern District of Texas, Dallas Division

Civil Action No. 3-95CV3190-H, Deposition - Damages

Voice Messaging in Digital Telephone Network

U.S.A. VenturCraft Corporation v. B & F Specialties

U.S. District Court for the Northern District of Texas, Abilene Division

Civil Action No. 196-CV-0105C, Deposition - Liability

Camper Trailers

Southwest Software, Inc. v. Harlequin Inc., et al

U.S. District Court for the Western District of Texas, Austin Division

Civil Action No. A 95 CA 32 SS, Deposition and Trial - Liability

Calibration of Half Tone Images For Printing

Frank A. Walton and J-F Equipment Co. v. Autotrol Corporation

U.S. District Court for the Northern District of Texas, Dallas Division

Civil Action No. 3-95-CV 0926-R, Deposition - Damages

Injection Pump for Injecting Chemicals Into Irrigation Lines

Signtech USA, Ltd. v. Vutek, Inc.

U.S. District Court for the Western District of Texas, San Antonio Division

Civil Action No. SA 95-CA-0226, Deposition and Trial - Liability

Printer for Large Signs With Image on Both Sides

Brooktree Corporation v. S3 Incorporated

U.S. District Court for the Southern District of California  
Civil Action No. 95-2388 R, Deposition - Damages

Graphics Accelerator for Video Monitor

BPA Fabrication, Inc. v. Jamak Fabrication, Inc., JMK International, Inc., A.M. Micallef, and  
Phil Burgess

American Arbitration Association, Houston, Texas No. 70 181 0237 95K

Arbitration - Liability

Golf Club Grip

Crown Equipment Corporation v. The Raymond Corporation

U.S. District Court for the Northern District of Ohio, Western Division (Toledo)

Case No. 3 93CV7356, Deposition and Trial - Damages Lift Truck Control Systems

Micro Chemical, Inc. v. Lextron, Inc. and Turnkey Computer Systems, Inc.

U.S. District Court for the Northern District of Texas, Lubbock Division

Civil Action No. 5-94-CV0139-C, Deposition - Liability and Damages, Markman (2)

Cattle Medical Health Computer

Stromag, Inc. v. Coyote Electronics, Inc.

U.S. District Court for the Northern District of Texas, Fort Worth Division

Civil Action No. 4:93-CV-716-A Deposition - Liability

Eddy Current Drive

Stewart Systems, Inc. v. Baking Technology Systems, Inc.

United States District Court, Northern District of Georgia, Atlanta Division

Civil Action No. 1:90-CV-2364-JOF, Trial - Damages

Baking Equipment

## **GUIDING PRINCIPLES**

### **STATUTES**

#### **Sec. 102. Conditions for patentability; novelty and loss of right to patent**

A person shall be entitled to a patent unless - \* \* \* \*

(f) he did not himself invent the subject matter sought to be patented, \* \* \* \*

#### **Sec. 116. Inventors**

When an invention is made by two or more persons jointly, they shall apply for patent jointly and each make the required oath, except as otherwise provided in this title. Inventors may apply for a patent jointly even though (1) they did not physically work together or at the same time, (2) each did not make the same type or amount of contribution, or (3) each did not make a contribution to the subject matter of every claim of the patent.

If a joint inventor refuses to join in an application for patent or cannot be found or reached after diligent effort, the application may be made by the other inventor on behalf of himself and the omitted inventor. The Director, on proof of the pertinent facts and after such notice to the omitted inventor as he prescribes, may grant a patent to the inventor making the application, subject to the same rights which the omitted inventor would have had if he had been joined. The omitted inventor may subsequently join in the application.

Whenever through error a person is named in an application for patent as the inventor, or through error an inventor is not named in an application, and such error arose without any deceptive intention on his part, the Director may permit the application to be amended accordingly, under such terms as he prescribes.

#### **Sec. 256. Correction of named inventor**

Whenever through error a person is named in an issued patent as the inventor, or through error an inventor is not named in an issued patent and such error arose without any deceptive intention on his part, the Director may, on application of all the parties and assignees, with proof of the facts and such other requirements as may be imposed, issued a certificate correcting such error.

The error of omitting inventors or naming persons who are not inventors shall not invalidate the patent in which such error occurred if it can be corrected as provided in this section. The court before which such matter is called in question may order correction of the patent on notice and hearing of all parties concerned and the Director shall issue a certificate accordingly.

## Sec. 262. Joint owners

In the absence of any agreement to the contrary, each of the joint owners of a patent may make, use, offer to sell, or sell the patented invention within the United States, or import the patented invention into the United States, without the consent of and without accounting to the other owners.

### CASES

*Pannu v. Iolab Corp.*, 155 F.3d 1344 (Fed.Cir. August 6, 1998):

"Inventors may apply for a patent jointly even though (1) they did not physically work together or at the same time, (2) each did not make the same type or amount of contribution, or (3) each did not make a contribution to the subject matter of every claim of the patent." 35 U.S.C. § 116 (1994). All that is required of a joint inventor is that he or she (1) contribute in some significant manner to the conception or reduction to practice of the invention, (2) make a contribution to the claimed invention that is not insignificant in quality, when that contribution is measured against the dimension of the full invention, and (3) do more than merely explain to the real inventors well-known concepts and/or the current state of the art. See *Fina Oil & Chem. Co. v. Ewen*, 123 F.3d 1466, 1473, 43 USPQ2d 1935, 1941 (Fed. Cir. 1997); see also *Ethicon, Inc. v. United States Surgical Corp.*, 135 F.3d 1456, 1460, 45 USPQ2d 1545, 1548 (Fed. Cir. 1998).

\* \* \* \*

Iolab not only argues that Link is a co-inventor, but also argues that it submitted evidence that Link was the sole inventor of the patented invention. Iolab asserts that because Pannu placed his contribution in the prior art more than one year before he met with Link in 1980, see 35 U.S.C. § 102(b) (1994) ("A person shall be entitled to a patent unless the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States."), Pannu cannot even claim the status of joint inventor. Iolab is mistaken. It is undisputed that Pannu and Link collaborated in the development and production of one-piece prototype embodiments of the invention. Link cannot claim the status of a sole inventor simply because Pannu had disclosed his ideas to Link and others more than a year earlier. During the meeting with Link, Pannu was doing more than simply providing Link with well-known principles or explaining the state of the art; he was contributing his ideas concerning the snag-resistant elements to a total inventive concept. Because it is undisputed that the invention was conceived while Link and Pannu were engaged in a collaborative enterprise and it is furthermore undisputed that Pannu conceived significant aspects of the invention, Pannu is certainly at least a co-inventor. See *Ethicon*, 135 F.3d at 1460, 45 USPQ2d at 1548 (Fed. Cir. 1998) (discussing co-inventorship generally); cf. *Hess*, 106 F.3d at 981, 41 USPQ2d at 1787 (finding no co-inventorship where district court did not clearly err in finding that the alleged co-inventor was, *inter alia*, "doing nothing more than explaining to the inventors what the then state of the art was" and "telling them what was available in the

marketplace by way of product”).

*Ethicon, Inc. v. United States Surgical Corp.*, 135 F.3d 1456 (Fed.Cir. February 3, 1998):

A patented invention may be the work of two or more joint inventors. See 35 U.S.C. § 116 (1994). Because “[c]onception is the touchstone of inventorship,” each joint inventor must generally contribute to the conception of the invention. *Burroughs Wellcome Co. v. Barr Lab., Inc.*, 40 F.3d 1223, 1227-28, 32 USPQ2d 1915, 1919 (Fed. Cir. 1994). “Conception is the ‘formation in the mind of the inventor, of a definite and permanent idea of the complete and operative invention, as it is hereafter to be applied in practice.’” *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1376, 231 USPQ 81, 87 (Fed. Cir. 1986) (quoting 1 *Robinson on Patents* 532 (1890)). An idea is sufficiently “definite and permanent” when “only ordinary skill would be necessary to reduce the invention to practice, without extensive research or experimentation.” *Burroughs Wellcome*, 40 F.3d at 1228.

The conceived invention must include every feature of the subject matter claimed in the patent. See *Sewall*, 21 F.3d at 415. Nevertheless, for the conception of a joint invention, each of the joint inventors need not “make the same type or amount of contribution” to the invention. 35 U.S.C. § 116. Rather, each needs to perform only a part of the task which produces the invention. On the other hand, one does not qualify as a joint inventor by merely assisting the actual inventor after conception of the claimed invention. See *Sewall*, 21 F.3d at 416-17; *Shatterproof Glass Corp. v. Libbey-Owens Ford Co.*, 758 F.2d 613, 624, 225 USPQ 634, 641 (Fed. Cir. 1985) (“An inventor ‘may use the services, ideas and aid of others in the process of perfecting his invention without losing his right to a patent.’” (quoting *Hobbs v. U.S. Atomic Energy Comm’n.*, 451 F.2d 849, 864, 171 USPQ 713, 724 (5th Cir. 1971))). One who simply provides the inventor with well-known principles or explains the state of the art without ever having “a firm and definite idea” of the claimed combination as a whole does not qualify as a joint inventor. See *Hess*, 106 F.3d at 981 (citing *O’Reilly v. Morse*, 56 U.S. (15 How.) 62, 111, 14 L.Ed. 601 (1853)). Moreover, depending on the scope of a patent’s claims, one of ordinary skill in the art who simply reduced the inventor’s idea to practice is not necessarily a joint inventor, even if the specification discloses that embodiment to satisfy the best mode requirement. See *Sewall*, 21 F.3d at 416.

Furthermore, a co-inventor need not make a contribution to every claim of a patent. See 35 U.S.C. § 116. A contribution to one claim is enough. See *SmithKline Diagnostics, Inc. v. Helena Lab. Corp.*, 859 F.2d 878, 888, 8 USPQ2d 1468, 1476 (Fed. Cir. 1988). Thus, the critical question for joint conception is who conceived, as that term is used in the patent law, the subject matter of the claims at issue.

35 U.S.C. § 256 provides that a co-inventor omitted from an issued patent may be added to the patent by a court “before which such matter is called in

question.” To show co-inventorship, however, the alleged co-inventor or co-inventors must prove their contribution to the conception of the claims by clear and convincing evidence. See Hess, 106 F.3d at 980. However, “an inventor’s testimony respecting the facts surrounding a claim of derivation or priority of invention cannot, standing alone, rise to the level of clear and convincing proof.” Price v. Symsek, 988 F.2d 1187, 1194, 26 USPQ2d 1031, 1036 (Fed. Cir. 1993). The rule is the same for an alleged co-inventor’s testimony. See Hess, 106 F.3d at 980. Thus, an alleged co-inventor must supply evidence to corroborate his testimony. See Price, 988 F.2d at 1194. Whether the inventor’s testimony has been sufficiently corroborated is evaluated under a “rule of reason” analysis. Id. at 1195. Under this analysis, “[a]n evaluation of all pertinent evidence must be made so that a sound determination of the credibility of the [alleged] inventor’s story may be reached.” Id.

Corroborating evidence may take many forms. Often contemporaneous documents prepared by a putative inventor serve to corroborate an inventor’s testimony. See id. at 1195-96. Circumstantial evidence about the inventive process may also corroborate. See Knorr v. Pearson, 671 F.2d 1368, 1373, 213 USPQ 196, 200 (CCPA 1982) (“[S]ufficient circumstantial evidence of an independent nature can satisfy the corroboration rule.”). Additionally, oral testimony of someone other than the alleged inventor may corroborate. See Price, 988 F.2d at 1195-96.

*Fina Oil & Chem. Co. v. Ewen*, 123 F.3d 1466 (Fed. Cir. September 2, 1997)

Conception is the touchstone to determining inventorship. See Sewall v. Walters, 21 F.3d 411, 415, 30 USPQ2d 1356, 1358 (Fed. Cir. 1994). Conception of a chemical substance requires knowledge of both the specific chemical structure of the compound and an operative method of making it. Burroughs Wellcome Co. v. Barr Labs., Inc., 40 F.3d 1223, 1229, 32 USPQ2d 1915, 1921 (Fed. Cir. 1994). The issue of joint inventorship is governed by 35 U.S.C. § 116, which states, in relevant part:

When an invention is made by two or more persons jointly, they shall apply for patent jointly and each make the required oath, except as otherwise provided in this title. Inventors may apply for a patent jointly even though (1) they did not physically work together or at the same time, (2) each did not make the same type or amount of contribution, or (3) each did not make a contribution to the subject matter of every claim of the patent.

This provision sets no explicit lower limit on the quantum or quality of inventive contribution required for a person to qualify as a joint inventor. Rather, a joint invention is simply the product of a collaboration between two or more persons working together to solve the problem addressed. Burroughs Wellcome, 40 F.3d at 1227, 32 USPQ2d at 1919. The determination of whether a person is a joint

inventor is fact specific, and no bright-line standard will suffice in every case.

Nonetheless, our precedent provides guidance as to what types of acts are, or are not, sufficient in quantum and quality to establish joint inventorship. One need not alone conceive of the entire invention, for this would obviate the concept of joint inventorship. However, a joint inventor must contribute in some significant manner to the conception of the invention. See *Pro-Mold & Tool Co. v. Great Lakes Plastics, Inc.*, 75 F.3d 1568, 1575, 37 USPQ2d 1626, 1632 (Fed. Cir. 1996) (citing *Sewall*, 21 F.3d at 415, 30 USPQ2d at 1358-59). As such, "each inventor must contribute to the joint arrival at a definite and permanent idea of the invention as it will be used in practice." *Burroughs Wellcome*, 40 F.3d at 1229, 32 USPQ2d at 1921.

If a person supplies the required quantum of inventive contribution, that person does not lose his or her status as a joint inventor just because he or she used the services, ideas, and aid of others in the process of perfecting the invention. See *Shatterproof Glass Corp. v. Libbey-Owens Ford Co.*, 758 F.2d 613, 624, 225 USPQ 634, 641 (Fed. Cir. 1985). However, those others may also in appropriate circumstances become joint inventors by their contributions. In addition, a person is not precluded from being a joint inventor simply because his or her contribution to a collaborative effort is experimental. See *Burroughs Wellcome*, 40 F.3d at 1229, 32 USPQ2d at 1921.

The basic exercise of the normal skill expected of one skilled in the art, without an inventive act, also does not make one a joint inventor. See *Sewall*, 21 F.3d at 416, 30 USPQ2d at 1359. Therefore, a person will not be a co-inventor if he or she does no more than explain to the real inventors concepts that are well known and the current state of the art. See *Hess*, 106 F.3d at 981, 41 USPQ2d at 1787. The case law thus indicates that to be a joint inventor, an individual must make a contribution to the conception of the claimed invention that is not insignificant in quality, when that contribution is measured against the dimension of the full invention.

In reaching its conclusion that Dr. Ewen is not a joint inventor of the subject matter claimed in the '851 patent, the district court relied on the doctrine of simultaneous conception and reduction to practice. That doctrine states that in some instances, an inventor may only be able to establish a conception by pointing to a reduction to practice through a successful experiment. See *Amgen Inc. v. Chugai Pharmaceutical Co.*, 927 F.2d 1200, 1206, 18 USPQ2d 1016, 1021 (Fed. Cir. 1991). Applying the doctrine, the district court looked to the 1987 Jones experiment as a potential reduction to practice that could be used to establish Dr. Ewen's conception. Because the product of that experiment was destroyed before it could be analyzed, however, the court found insufficient evidence that there had had been a reduction to practice or a conception by Dr. Ewen.



The district court's analysis of joint inventorship in this case effectively required Dr. Ewen to show that he was the sole inventor of the '851 patent. That was error. The doctrine of simultaneous conception and reduction to practice applies to the conception of the entire invention. Thus, it is applied in priority disputes to determine priority of conception as between one patent or application and another application. *See, e.g., Burroughs Wellcome*, 40 F.3d at 1229, 32 USPQ2d at 1920; *Amgen*, 927 F.2d at 1206, 18 USPQ2d at 1021; *Smith v. Bousquet*, 111 F.2d 157, 162, 45 USPQ 347, 352 (CCPA 1940); *see also* 3 Donald S. Chisum, *Chisum on Patents* § 10.04[5] (1997). Conception and reduction to practice of the entire claimed invention may be relevant to establish that a first person conceived of an invention before another person entered the scene, and that the first person is therefore the sole inventor. However, the doctrine cannot be used, as the district court did here, to show that because the first person did not conceive or reduce to practice the entire claimed invention, he or she did not at least contribute in some significant way to the ultimate conception.

Of course, every putative inventor must nonetheless provide corroborating evidence of any asserted contributions to the conception of the invention. Like conception of the entire invention, a contribution to conception is a mental act which cannot be accurately verified without corroboration. *See Price v. Symsek*, 988 F.2d 1187, 1194, 26 USPQ2d 1031, 1036-37 (Fed. Cir. 1993); *Linkow v. Linkow*, 517 F.2d 1370, 1373, 186 USPQ 223, 225 (CCPA 1975).

*Burroughs Wellcome Co. v. Barr Lab., Inc.*, 40 F.3d 1223, 32 USPQ2d 1915 (Fed. Cir. November 22, 1994):

A joint invention is the product of a collaboration between two or more persons working together to solve the problem addressed. 35 U.S.C. § 116 (1988); *Kimberly-Clark Corp. v. Proctor & Gamble Distrib. Co.*, 973 F.2d 911, 917, 23 USPQ2d 1921, 1926 (Fed. Cir. 1992). People may be joint inventors even though they do not physically work on the invention together or at the same time, and even though each does not make the same type or amount of contribution. 35 U.S.C. § 116. The statute does not set forth the minimum quality or quantity of contribution required for joint inventorship.

Conception is the touchstone of inventorship, the completion of the mental part of invention. *Sewall v. Walters*, 21 F.3d 411, 415, 30 USPQ2d 1356, 1359 (Fed. Cir. 1994). It is "the formation in the mind of the inventor, of a definite and permanent idea of the complete and operative invention, as it is hereafter to be applied in practice." *Hybritech Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1376, 231 USPQ 81, 87 (Fed. Cir. 1986) (citation omitted). Conception is complete only when the idea is so clearly defined in the inventor's mind that only ordinary skill would be necessary to reduce the invention to practice, without extensive research or experimentation. *Sewall*, 21 F.3d at 415, 30 USPQ2d at 1359; *see also Coleman v. Dines*, 754 F.2d 353, 359, 224 USPQ 857, 862 (Fed.

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Cir. 1985) (conception must include every feature of claimed invention). Because it is a mental act, courts require corroborating evidence of a contemporaneous disclosure that would enable one skilled in the art to make the invention. *Coleman v. Dines*, 754 F.2d at 359, 224 USPQ at 862.

Thus, the test for conception is whether the inventor had an idea that was definite and permanent enough that one skilled in the art could understand the invention; the inventor must prove his conception by corroborating evidence, preferably by showing a contemporaneous disclosure. An idea is definite and permanent when the inventor has a specific, settled idea, a particular solution to the problem at hand, not just a general goal or research plan he hopes to pursue. See *Fiers v. Revel*, 984 F.2d 1164, 1169, 25 USPQ2d 1601, 1605 (Fed. Cir. 1993); *Amgen, Inc. v. Chugai Pharmaceutical Co.*, 927 F.2d 1200, 1206, 18 USPQ2d 1016, 1021 (Fed. Cir. 1991) (no conception of chemical compound based solely on its biological activity). The conception analysis necessarily turns on the inventor's ability to describe his invention with particularity. Until he can do so, he cannot prove possession of the complete mental picture of the invention. These rules ensure that patent rights attach only when an idea is so far developed that the inventor can point to a definite, particular invention.

But an inventor need not know that his invention will work for conception to be complete. *Applegate v. Scherer*, 332 F.2d 571, 573, 141 USPQ 796, 799 (CCPA 1964). He need only show that he had the idea; the discovery that an invention actually works is part of its reduction to practice. *Id.*; see also *Oka v. Youssefye*, 849 F.2d 581, 584 n.1, 7 USPQ2d 1169, 1171 n.1 (Fed. Cir. 1988).

Barr and Novopharm suggest that the inventor's definite and permanent idea must include a reasonable expectation that the invention will work for its intended purpose. They argue that this expectation is of paramount importance when the invention deals with uncertain or experimental disciplines, where the inventor cannot reasonably believe an idea will be operable until some result supports that conclusion. Without some experimental confirmation, they suggest, the inventor has only a hope or an expectation, and has not yet conceived the invention in sufficiently definite and permanent form. But this is not the law. An inventor's belief that his invention will work or his reasons for choosing a particular approach are irrelevant to conception. *MacMillan v. Moffett*, 432 F.2d 1237, 1239, 167 USPQ 550, 552 (CCPA 1970).

To support their reasonable expectation rule, Barr and Novopharm point to a line of cases starting with *Smith v. Bousquet*, 111 F.2d 157, 45 U.S.P.Q. 347 (CCPA 1940), establishing the so-called doctrine of simultaneous conception and reduction to practice.<sup>7</sup> *Smith* was an interference priority contest between alleged

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<sup>7</sup> Barr and Novopharm also point to dictum in *Biel v. Chesin*, 347 F.2d 898, 146 USPQ 293 (CCPA 1965), suggesting that conception of a method of treating the human body requires a reasonable

inventors of the use of two known compounds as insecticides. Both parties asserted priority based on testing of the compounds against selected insect species. Noting the unpredictability of the experimental sciences of chemistry and biology, in particular the uncertain relationship between chemical structure and biological activity, Smith declined to find conception until the invention had been reduced to practice by the filing of the first patent application. *Id.* at 162, 45 USPQ at 352. Barr and Novopharm read this and subsequent cases to establish, or at least support, their rule that conception of an invention in an unpredictable field occurs only when the inventor has reasonable grounds to believe the invention will work.

But these cases do not stand for the proposition that an inventor can never conceive an invention in an unpredictable or experimental field until reduction to practice. In rejecting the asserted evidence of conception, *Smith* said as to one of the compounds:

it is apparent from the record that neither [party] had in mind at the time the suggestions were originally made, nor at any time thereafter, until successful tests, if any, were made, what insects, if any, it might be effective against, or how it might be applied to produce the desired results. Accordingly, neither party had a definite idea of the "complete and operative invention" here involved prior to a successful reduction -- actual or constructive -- of it to practice.

*Id.* Thus, in awarding priority to Smith based on his constructive reduction to practice, the court relied not on the inherent unpredictability of the science, but on the absence of any evidence to corroborate an earlier conception for either of the parties.

It is undoubtedly true that "[i]n some instances, an inventor is unable to establish a conception until he has reduced the invention to practice through a successful experiment." *Amgen*, 927 F.2d at 1206, 18 USPQ2d at 1021; *Alpert v. Slatin*, 305 F.2d 891, 894, 134 USPQ 296, 299 (CCPA 1962) (no conception "where results at each step do not follow as anticipated, but are achieved empirically by what amounts to trial and error"). But in such cases, it is not merely because the field is unpredictable; the alleged conception fails because, as in *Smith*, it is incomplete. Then the event of reduction to practice in effect provides the only evidence to corroborate conception of the invention.

Under these circumstances, the reduction to practice can be the most definitive corroboration of conception, for where the idea is in constant flux, it is not definite and permanent. A conception is not complete if the subsequent course

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understanding that the method will work for its intended purpose. No court has applied this dictum as controlling and we decline to do so here.

of experimentation, especially experimental failures, reveals uncertainty that so undermines the specificity of the inventor's idea that it is not yet a definite and permanent reflection of the complete invention as it will be used in practice. See *Amgen*, 927 F.2d at 1207, 18 USPQ2d at 1021 (no conception until reduction to practice where others tried and failed to clone gene using suggested strategy); *Rey-Bellet v. Engelhardt*, 493 F.2d 1380, 1387, 181 USPQ 453, 457-58 (CCPA 1974) (focusing on nature of subsequent research as indicator that inventors encountered no perplexing intricate difficulties). It is this factual uncertainty, not the general uncertainty surrounding experimental sciences, that bears on the problem of conception.

Barr and Novopharm argue for a broader reading of *Amgen* and *Fiers* in support of their reasonable expectation rule. Both of these cases involve conception of a DNA encoding a human protein -- a chemical compound. Conception of a chemical substance includes knowledge of both the specific chemical structure of the compound and an operative method of making it. *Fiers*, 984 F.2d at 1169, 25 USPQ2d at 1604; *Amgen*, 927 F.2d at 1206, 18 USPQ2d at 1021; *Oka*, 849 F.2d at 583, 7 USPQ2d at 1171. The alleged inventors in *Fiers* and *Amgen* claimed conception of their respective inventions before they knew relevant chemical structure -- the nucleotide sequence -- so the courts found no conception until experimentation finally revealed that structure. Here, though, Burroughs Wellcome's inventions use a compound of known structure; the method of making the compound is also well known.

We emphasize that we do not hold that a person is precluded from being a joint inventor simply because his contribution to a collaborative effort is experimental. Instead, the qualitative contribution of each collaborator is the key -- each inventor must contribute to the joint arrival at a definite and permanent idea of the invention as it will be used in practice.

Nor do we suggest that a bare idea is all that conception requires. The idea must be definite and permanent in the sense that it involves a specific approach to the particular problem at hand. It must also be sufficiently precise that a skilled artisan could carry out the invention without undue experimentation. And, of course, the alleged conception must be supported by corroborating evidence. On the facts before us, it is apparent that the district court correctly ruled against Barr and Novopharm as to five of the patents, but that the court's judgment as to the sixth, the '750 patent, was premature.

The '232, '838, '130, '208, and '538 patents encompass compositions and methods of using AZT to treat AIDS. The Burroughs Wellcome inventors claim conception of these inventions prior to the NIH experiments, based on the draft British patent application. That document is not itself a conception, for conception occurs in the inventors' minds, not on paper. The draft simply corroborates the claim that they had formulated a definite and permanent idea of the inventions by

the time it was prepared.

The Burroughs Wellcome inventors set out with the general goal of finding a method to treat AIDS, but by the time Broder confirmed that AZT was active against HIV, they had more than a general hope or expectation. They had thought of the particular antiviral agent with which they intended to address the problem, and had formulated the idea of the inventions to the point that they could express it clearly in the form of a draft patent application, which Barr and Novopharm concede would teach one skilled in the art to practice the inventions. The draft expressly discloses the intended use of AZT to treat AIDS. It sets out the compound's structure, which, along with at least one method of preparation, was already well known. The draft also discloses in detail both how to prepare a pharmaceutical formulation of AZT and how to use it to treat a patient infected with HIV. The listed dosages, dose forms, and routes of administration conform to those eventually approved by the FDA. The draft shows that the idea was clearly defined in the inventors' minds; all that remained was to reduce it to practice --to confirm its operability and bring it to market. *See Haskell v. Colebourne*, 671 F.2d 1362, 1365-66, 213 USPQ 192, 194 (CCPA 1982) (enabling draft patent application sufficient to corroborate conception).

An examination of the events that followed the preparation of Burroughs Wellcome's draft confirms the soundness of the conception. Broder and Mitsuya received from Burroughs Wellcome a group of compounds, known to Broder and Mitsuya only by code names, selected for testing by the Burroughs Wellcome inventors. They then tested those compounds for activity against HIV in their patented cell line. The test results revealed for the first time that one of the compounds, later revealed to be AZT, was exceptionally active against the virus.

Here, though, the testing was brief, simply confirming the operability of what the draft application disclosed. True, the science surrounding HIV and AIDS was unpredictable and highly experimental at the time the Burroughs Wellcome scientists made the inventions. But what matters for conception is whether the inventors had a definite and permanent idea of the operative inventions. In this case, no prolonged period of extensive research, experiment, and modification followed the alleged conception. By all accounts, what followed was simply the normal course of clinical trials that mark the path of any drug to the marketplace. That is not to say, however, that the NIH scientists merely acted as a "pair of hands" for the Burroughs Wellcome inventors. Broder and Mitsuya exercised considerable skill in conducting the tests, using their patented cell line to model the responses of human cells infected with HIV. Lehrman did suggest initial concentrations to Broder, but she hardly controlled the conduct of the testing, which necessarily involved interpretation of results for which Broder and Mitsuya, and very few others, were uniquely qualified. But because the testing confirmed the operability of the inventions, it showed that the Burroughs Wellcome inventors had a definite and permanent idea of the inventions. It was part of the reduction to

practice and inured to the benefit of Burroughs Wellcome.

Barr and Novopharm allege error in the district court's refusal to hear their evidence of the poor predictive value of the murine retrovirus screens for activity against HIV. Regardless of the predictive value of the murine tests, however, the record shows that soon after those tests, the inventors determined, for whatever reason, to use AZT as a treatment for AIDS, and they prepared a draft patent application that specifically set out the inventions, including an enabling disclosure. Obviously, enablement and conception are distinct issues, and one need not necessarily meet the enablement standard of 35 U.S.C. § 112 to prove conception. *See Fiers*, 984 F.2d at 1169, 25 USPQ2d at 1605. But the enabling disclosure does suffice in this case to confirm that the inventors had concluded the mental part of the inventive process -- that they had arrived at the final, definite idea of their inventions, leaving only the task of reduction to practice to bring the inventions to fruition.

The question is not whether Burroughs Wellcome reasonably believed that the inventions would work for their intended purpose, the focus of the evidence offered by Barr and Novopharm, but whether the inventors had formed the idea of their use for that purpose in sufficiently final form that only the exercise of ordinary skill remained to reduce it to practice. *See MacMillan v. Moffett*, 432 F.2d at 1239, 167 USPQ at 552 (Inventor's "reasons or lack of reasons for including U-5008 are not relevant to the question of conception. The important thing is that he did think in definite terms of the method claimed."). Whether or not Burroughs Wellcome believed the inventions would in fact work based on the mouse screens is irrelevant.

We do not know precisely when the inventors conceived their inventions, but the record shows that they had done so by the time they prepared the draft patent application that thoroughly and particularly set out the inventions as they would later be used. The district court correctly ruled that on this record, the NIH scientists were not joint inventors of these inventions.

The '750 patent is another question. It claims "[a] method of increasing the number of T-lymphocytes in a human infected with the [HIV] virus comprising administering to said human an effective amount of" AZT. Novopharm argues that there is no evidence, under any test of inventorship, that the Burroughs Wellcome inventors conceived of this invention until after the Phase I patient study conducted by Broder and Yarchoan revealed that AZT could lead to increased levels of T-cells in AIDS patients. Novopharm is right that the record is devoid of any statement that the inventors thought AZT could raise a patient's T-cell levels, but evidence need not always expressly show possession of the invention to corroborate conception. The district court held that the record supported conception as a matter of law, concluding that "an increase in T-lymphocyte count was an 'obvious,' natural phenomenon known to the [Burroughs Wellcome]

inventors that would result from the inhibition of a retrovirus." *Burroughs Wellcome Co. v. Barr Lab., Inc.*, 828 F. Supp. at 1213. Burroughs Wellcome argues that this conclusion was proper because increased T-cell count is simply an obvious property or use of the greater discovery at issue here, the treatment of HIV infection with AZT. Because an increase in T-lymphocytes follows inevitably from treatment of AIDS patients with AZT, Burroughs Wellcome says, Broder and Yarchoan merely observed that the method invented by the Burroughs Wellcome inventors had qualities that the inventors failed to perceive. Burroughs Wellcome says this is not an inventive contribution to the claims of any of the AZT patents.

But even though all six patents arise from the same parent application and are subject to terminal disclaimers to avoid rejection for obviousness-type double patenting, each patent claims a different invention.<sup>8</sup> See *In re Longi*, 759 F.2d 887, 892, 225 [F.3d 1232] USPQ 645, 648 (Fed. Cir. 1985) (inventor can get only one patent for any single invention). It is true that the Patent Office determined that the method of the '750 patent would have been obvious to those skilled in the art in light of the inventions claimed in the other patents. That is, however, irrelevant to the question whether the Burroughs Wellcome inventors had conceived of the invention before they learned the results of the Phase I trials. For conception, we look not to whether one skilled in the art could have thought of the invention, but whether the alleged inventors actually had in their minds the required definite and permanent idea. Cf. *Bosies v. Benedict*, 27 F.3d 539, 543, 30 USPQ2d 1862, 1865 (Fed. Cir. 1994) (testimony of noninventor as to noninventor's understanding of inventor's written formula insufficient to prove conception). The record does not now support resolution of this question as a matter of law.

The alleged conception is supported by testimony of Burroughs Wellcome's experts, Burroughs Wellcome's draft Phase I protocol, and the same draft patent application that corroborates conception of the other five inventions. The experts testified that those skilled in the art at the time expected increased immune function to accompany inhibition of HIV. The draft patent application discloses that HIV preferentially destroys T-cells, that AIDS is associated with progressive depletion of T-cells, and that AZT is an effective treatment for HIV infection. Finally, the draft protocol directs the administrators of the Phase I study to monitor patients' T-lymphocyte count. This evidence supports an inference that the Burroughs Wellcome inventors did have the necessary definite and permanent

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<sup>8</sup> We must assume for the purposes of this case that the '750 patent is drawn to an invention different from each of the other five patents. The parties do not ask us to decide whether claims drawn to an effect or mechanism of action of AZT – its ability to raise T-cell count – reach the same invention as (that is, are inherent) claims drawn to use of the drug to treat HIV infection or AIDS, and we express no opinion on that. The dissent therefor goes beyond the issues presented and the record before us to decide on the basis of what the dissenting judge thinks he knows. That is not the role of an appellate court.





**CLAIM CHART OF 363 PATENT CLAIMS AND CORRESPONDING SUPPORT IN 798  
PATENT APPLICATION**

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                       |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. | Apparatus for a combined lithographic/flexographic printing process comprising:<br>a substrate;<br>a plurality of successive printing stations for printing color images on the substrate in a continuous in-line process;<br>one of said stations comprising a flexographic printing station for printing a liquid vehicle image on said substrate with a slurry containing an encapsulated essence using the flexographic process;<br>at least one of said successive printing stations being a lithographic printing station; and<br>an overcoating applied over the liquid vehicle image on the printed substrate at at least one of said successive lithographic printing stations using the lithographic process in said continuous in-line process. | Substrate "S" in Figure 1<br>Printing machine in Figure 1<br>Page 9, lines 11 - 20<br><br>Figures 1 - 5<br><br>Page 19, line 15<br><br>Page 6, lines 12 - 16<br><br>Page 7, line 26 to page 8, line 2 |
| 2. | Apparatus as in claim 1 wherein said overcoating is an aqueous overcoating.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Page 7, line 26 to page 8, line 2<br>Page 9, lines 1 to 10<br>Page 18, lines 25 to 28                                                                                                                 |
| 3. | Apparatus as in claim 1 wherein said overcoating is an ultraviolet ink overcoating.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Page 18, line 29 to page 19, line 3<br>Page 20, lines 9 to 13                                                                                                                                         |
| 4. | Apparatus as in claim 1 wherein:<br>said substrate is a paper sheet; and<br>said apparatus includes a sheet feeder.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Sheet "S" in Figure 1 is paper<br>Page 9, line 22                                                                                                                                                     |
| 5. | Apparatus as in claim 1 wherein:<br>said substrate is a web; and<br>said apparatus includes a web feeder.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Page 8, line 33 to page 9, line 1                                                                                                                                                                     |

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| 6. | Apparatus for a combined lithographic/flexographic printing process comprising:<br>a plurality of successive printing stations for printing color images on a substrate in a continuous in-line process;<br>one of said stations comprising a flexographic printing station printing an aqueous-based vehicle image using the flexographic process to form a metallic coating;<br>a suspended metallic material being included in said aqueous-based vehicle image; and<br>at least one of the successive printing stations comprising an offset lithographic printing station printing a color image over the aqueous-based vehicle image using the offset lithographic process in said continuous in-line process. | Printing machine in Figure 1<br><br>Figures 1 - 5<br><br>Page 2, lines 27 to 30<br>Page 19, lines 12 - 17; Page 19, line 27 - page 20 line 8<br>Page 9, lines 16 - 20<br>Page 9, lines 26 to 31<br>Page 6, lines 12 - 16 |
| 7. | Apparatus as in claim 6 wherein said suspended material includes uniform-sized metal particles to form said metallic coating.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Page 20, lines 4 - 8                                                                                                                                                                                                     |
| 8. | Apparatus as in claim 6 wherein said suspended material includes nonuniform-sized metal particles to form said metallic coating.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Page 7, lines 32 - page 8, line 2 (Metallic pigments inherently have non-uniform particles)                                                                                                                              |
| 9. | Apparatus as in claim 6 further including: said flexographic printing station including a plate cylinder having a flexographic plate thereon, a blanket cylinder, and an impression cylinder;<br>a flexographic plate image transferred from said plate cylinder to said blanket cylinder, said image being formed of said metallic coating, said blanket cylinder transferring said metallic coating to said impression cylinder for printing said flexographic plate image on said substrate; and<br>an anilox roller associated with said flexographic plate for supplying said aqueous-based vehicle containing said suspended metallic material to said flexographic plate.                                     | Printing machine in Figure 1<br>Page 10, lines 28 to 30<br><br>Page 10, line 28 to page 11, line 13<br>Page 2, lines 27 to 30<br><br>Page 12, lines 1 - 25                                                               |

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| 10. | <p>Apparatus for creating a combined lithographic/flexographic printing process comprising:</p> <p>a plurality of successive printing stations for printing color images on a substrate in a continuous in-line process;</p> <p>one of said stations comprising a flexographic printing station for printing a first color image using the flexographic process; and</p> <p>at least one of the successive printing stations comprising an offset lithographic printing station for printing a second color image over the first color image using the offset lithographic process in said continuous in-line process.</p> | <p>Printing machine in Figure 1; Page 9, lines 11 - 20</p> <p>Figures 1 - 5<br/>Page 2, lines 27 to 33<br/>Page 9, lines 16 - 20<br/>Page 9, lines 26 to 31<br/>Page 6, lines 12 - 16</p> |
| 11. | <p>Apparatus as in claim 10 further including:</p> <p>said flexographic printing station including a plate cylinder, a blanket cylinder, and an impression cylinder;</p> <p>a flexographic plate on said plate cylinder;</p> <p>an anilox roller associated with said flexographic plate for supplying a first color to said flexographic plate to form said first color image; and</p> <p>said blanket cylinder receiving said first color image from said plate cylinder and transferring said first color image to said impression cylinder for printing on said substrate.</p>                                         | <p>Page 9, lines 32 - 35</p> <p>Page 10, lines 28 - 30<br/>Page 12, lines 1 - 25</p> <p>Page 11, lines 9 - 13</p>                                                                         |

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| <p>12.</p> | <p>Apparatus for creating a combined lithographic/flexographic printing process comprising:</p> <p>a substrate;</p> <p>a plurality of successive printing stations for printing color images on the substrate in a continuous in-line process;</p> <p>at least two successive ones of said printing stations being flexography stations and comprising</p> <p>(1) a supply of liquid coating;</p> <p>(2) a plate cylinder associated with a blanket cylinder, said plate cylinder having a flexographic plate thereon;</p> <p>(3) an anilox roller associated with said liquid supply coating and said plate cylinder for delivering said liquid coating to said flexographic plate to form an image for transfer to said blanket cylinder;</p> <p>(4) an impression cylinder for receiving said liquid coating image transferred from said blanket cylinder and printing said image on said substrate, said at least two flexography stations printing the same liquid coating image in sequence and in superimposed relationship; and</p> <p>at least one offset lithographic printing station for receiving said substrate and printing over said liquid coating image.</p> | <p>Substrate "S" in Figure 1; Printing machine in Figure 1; Page 9, lines 11 - 20</p> <p>Printing machine in Figure 1</p> <p>Page 11, lines 25 to 29</p> <p>Printing machine in Figure 1</p> <p>Page 10, lines 28 to 30</p> <p>Page 19, lines 4 - 11</p> <p>Page 20, lines 19 - 23</p> <p>Page 10, lines 28 to 30</p> <p>Printing machine in Figure 1</p> <p>Page 20, lines 19 - 23</p> <p>Page 20, lines 19 - 23</p> <p>Page 7, line 26 to page 8, line 2</p> <p>Page 20, line 30 to page 21, line 8</p> |
| <p>13.</p> | <p>Apparatus as in claim 12 wherein said liquid coating image printed on said substrate is a white color ink.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <p>Page 7, line 34</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <p>14.</p> | <p>Apparatus as in claim 12 further including an air dryer associated with each of said impression cylinders on said flexography stations, said air dryer having sufficient air velocity for drying said liquid coating before the substrate is transferred to the successive printing station in said continuous in-line process.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <p>Page 6, lines 12 to 16</p> <p>Page 7, lines 26 to 32</p>                                                                                                                                                                                                                                                                                                                                                                                                                                               |

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| <p>15.</p> | <p>Apparatus for a combined lithographic/ flexographic printing process comprising:</p> <ul style="list-style-type: none"> <li>a plurality of successive printing stations for printing color images on a substrate in a continuous in-line process, said printing stations including both lithographic and flexographic printing stations;</li> <li>a blanket cylinder at at least a first one of said flexographic printing stations;</li> <li>flexographic ink-providing means at said at least first one of said flexographic printing stations for applying a flexographic ink to said blanket cylinder to form an image;</li> <li>a substrate for receiving said flexographic ink image transferred from said blanket cylinder; and</li> <li>at least one subsequent lithographic printing station in said in-line process for receiving said image printed substrate and printing an additional colored ink image on said substrate on top of said flexographic ink image using offset lithography.</li> </ul> | <p>Printing machine in Figure 1<br/>Page 9, lines 11 - 20<br/>Figures 1 - 5</p> <p>Page 10, lines 28 to 30</p> <p>Figure 2; Figure 4<br/>Page 10, line 28 to page 11, line 13</p> <p>Substrate "S" in Figure 1</p> <p>Page 9, lines 16 - 20<br/>Page 9, lines 26 to 31<br/>Page 6, lines 12 - 16</p> |
| <p>16.</p> | <p>Apparatus as in claim 15 further comprising:</p> <ul style="list-style-type: none"> <li>a plate cylinder at said at least first one of said flexographic stations;</li> <li>a flexographic plate on said plate cylinder for receiving and transferring said flexographic ink to said blanket cylinder; and</li> <li>said flexographic ink-providing means including a flexographic ink supply and an anilox roller associated with said flexographic ink supply for transferring said flexographic ink to said flexographic plate.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <p>Page 10, line 28 to page 11, line 13</p> <p>Page 10, line 28 to page 11, line 13</p> <p>Figure 2; Figure 5<br/>Page 19 lines 4 - 11</p> <p>Page 20, lines 19 - 23</p>                                                                                                                             |

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| 17. | <p>Apparatus for a combined lithographic/flexographic printing process for printing a multicolored image comprising:</p> <p>a plurality of successive printing stations for printing color on a substrate in a continuous in-line process, said printing stations including both lithographic and flexographic printing stations;</p> <p>at least one of said flexographic printing stations having:</p> <p>(1) a plate cylinder and a blanket cylinder, said plate cylinder including a flexographic plate having an image thereon for transferring a flexographic color ink image to said blanket cylinder;</p> <p>(2) an etched anilox roller for applying a flexographic color ink to said flexographic plate on said plate cylinder;</p> <p>(3) an impression cylinder in ink-transfer relationship with said blanket cylinder for transferring said flexographic color ink image from said blanket cylinder to said substrate; and</p> <p>at least one of said succeeding printing stations being a lithographic printing station using offset lithography for printing additional colored ink images on top of said flexographic ink image.</p> | <p>Printing machine in Figure 1<br/>Page 9, lines 11 - 20<br/>Figures 1 - 5</p> <p>Page 10, line 28 to page 11, line 13</p> <p>Page 12, lines 1 - 25<br/>Page 19, lines 4 - 11</p> <p>Page 9, lines 32 - 35</p> <p>Page 9, lines 16 - 20<br/>Page 9, lines 26 to 31<br/>Page 6, lines 12 - 16</p> |
| 18. | Apparatus as in claim 17 wherein said additional colored ink images are formed with lithographic inks.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Page 7, line 26 to page 8, line 2                                                                                                                                                                                                                                                                 |
| 19. | Apparatus as in claim 17 wherein said colored ink images are formed with waterless inks.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Page 9, lines 1 to 8<br>Page 19, lines 18 to 21                                                                                                                                                                                                                                                   |
| 20. | Apparatus as in claim 17 further including an air dryer adjacent to said impression cylinder for drying the flexographic ink image transferred to said substrate before said additional colored ink images are printed thereon.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Page 6, lines 12 to 16<br>Page 7, lines 26 to 32                                                                                                                                                                                                                                                  |
| 21. | Apparatus as in claim 17 further including halftone printing plates for printing said colored ink images.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Halftone printing plates are conventional in offset printing                                                                                                                                                                                                                                      |

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| 22. | Apparatus as in claim 17 wherein said flexographic ink image and said colored ink images are printed as solid colors and/or with halftone printing plates in sequence and in registry in said successive printing stations to produce said multicolored image on said substrate.                                                                                                                                                                                                                                                                                                                                                                                     | Printing machine in Figure 1<br>"Registration" of one color to the next color is conventional in offset printing. Halftone plates are conventional.                                                                           |
| 23. | Apparatus as in claim 17 wherein said printing apparatus includes a sheet-fed press.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Sheet "S" in Figure 1 is paper; Page 9, line 22                                                                                                                                                                               |
| 24. | Apparatus as in claim 17 wherein at least one of said flexographic printing stations prints said flexographic ink image with liquid vehicle slurry containing an encapsulated essence.                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Figures 1- 5<br>Page 19, line 15                                                                                                                                                                                              |
| 25. | Apparatus as in claim 17 wherein at least one of said printing stations prints said flexographic ink image with a water-based liquid vehicle containing suspended particles.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Figures 1 - 5<br>Page 2, lines 27 to 30                                                                                                                                                                                       |
| 26. | Apparatus as in claim 25 wherein said suspended particles are uniform in size.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Page 20, lines 4 - 8                                                                                                                                                                                                          |
| 27. | Apparatus as in claim 25 wherein said suspended particles are nonuniform in size.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Page 7, lines 32 - page 8, line 2<br>(Metallic pigments inherently have non-uniform particles)                                                                                                                                |
| 28. | Apparatus as in claim 25 wherein said suspended particles are metallic particles.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Page 19, lines 12 - 17; Page 19, line 27 - page 20, line 8                                                                                                                                                                    |
| 29. | A method of combining lithography and flexographic printing in a continuous in-line process comprising the steps of:<br>providing a plurality of successive lithographic/flexographic printing stations for printing colored ink images on a substrate;<br>printing a flexographic ink image on said substrate at at least one of said flexographic stations;<br>transferring said printed substrate to at least one subsequent printing station in said continuous in-line process; and<br>printing colored ink images on top of said flexographic ink image at at least one of said subsequent lithographic printing stations with an offset lithographic process. | Printing machine in Figure 1<br>Page 9, lines 11 - 20<br><br>Page 10, line 28 to page 11, line 13<br><br>Page 10, line 28 to page 11, line 13<br><br>Page 9, lines 16 - 20<br>Page 9, lines 26 to 31<br>Page 6, lines 12 - 16 |

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| 30. | A method as in claim 29 further comprising the step of drying said flexographic ink image on said substrate with an air dryer prior to printing said colored ink images thereon.                                                                                                                                                                                                                                                                                                                                                                                                     | Page 6, lines 12 - 16<br>Page 7, lines 26 to 32                                                                                                                                                       |
| 31. | A method as in claim 29 further including the step of printing a coating on top of said colored ink images at one of said plurality of subsequent printing stations.                                                                                                                                                                                                                                                                                                                                                                                                                 | Page 17, lines 15 to 25<br>Page 18, lines 25 to 28<br>Page 18, lines 29 to 35                                                                                                                         |
| 32. | A method as in claim 29 wherein said colored inks forming said colored ink images are waterless.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Page 9, lines 1 to 8<br>Page 19, lines 18 to 21                                                                                                                                                       |
| 33. | A method as in claim 29 wherein said colored inks forming said colored ink images are in a solvent-based liquid vehicle.                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Page 19, lines 27 to 34                                                                                                                                                                               |
| 34. | A method as in claim 29 further including the steps of:<br>printing a slurry on said substrate at any of said printing stations in said continuous in-line process;<br>using an encapsulated essence in said slurry; and<br>printing an overcoating over said slurry at a subsequent printing station in said in-line process to protect said essence.                                                                                                                                                                                                                               | Figures 1 - 5; Page 19, line 15<br><br>Page 19, lines 12 to 17<br>Page 17, lines 15 to 25; Page 18, lines 25 to 28;<br>Page 18, lines 29 to 35                                                        |
| 35. | A method as in claim 34 further including the step of printing an aqueous-based coating over said slurry.                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Page 20, lines 9 to 33                                                                                                                                                                                |
| 36. | A method as in claim 34 further including the step of printing an ultraviolet coating over said slurry.                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Page 18, line 29 to page 19, line 3<br>Page 20, lines 9 to 13                                                                                                                                         |
| 37. | A method of combining offset lithography and flexographic printing in a continuous in-line process comprising the steps of:<br>providing a substrate;<br>applying a flexographic ink to a blanket cylinder in a pattern with a coating head at a first flexographic printing station;<br>transferring said pattern of flexographic ink from said blanket cylinder to the substrate; and<br>printing a waterless ink pattern over said flexographic ink pattern on said substrate at at least one subsequent offset lithographic printing station in said continuous in-line process. | Substrate "S" in Figure 1<br>Figures 1 - 5; Printing machine in Figure 1; Page 10, lines 28 to 30<br><br>Page 10, line 28 to page 11, line 13<br><br>Page 6, lines 12 to 16<br>Page 7, lines 26 to 32 |

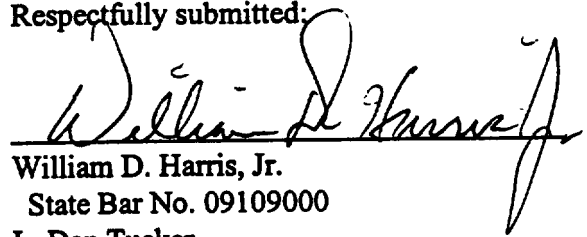


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| 38. | <p>A method of combining lithography and flexographic printing in a continuous in-line process comprising the steps of:</p> <p>printing an aqueous-based vehicle image having suspended particles therein on a substrate at a first flexographic printing station;</p> <p>transferring said image printed substrate to at least one additional printing station in said continuous in-line process; and</p> <p>printing additional colored ink images on said printed substrate over said aqueous-based vehicle image in an offset lithographic process at said at least one additional printing station in said in-line process.</p>                                                                                                                                                                                                                                                                                                                                                                   | <p>Printing machine in Figure 1<br/>Figures 1 - 5</p> <p>Substrate "S" in Figure 1</p> <p>Page 9, lines 16 - 20<br/>Page 9, lines 26 to 31<br/>Page 5, lines 12 - 15</p>                                                                                |
| 39. | <p>A method of combining lithography and flexographic printing in a continuous in-line process comprising the steps of:</p> <ol style="list-style-type: none"> <li>(1) providing a plurality of successive printing stations for printing liquid vehicle images on a substrate in said in-line continuous process;</li> <li>(2) utilizing an anilox roller to transfer a liquid ink as said liquid vehicle to a flexographic plate image at at least one of said printing stations;</li> <li>(3) printing said liquid ink from said flexographic plate image to a substrate;</li> <li>(4) transferring said printed substrate with said liquid ink image to a subsequent printing station in said in-line printing process;</li> <li>(5) repeating steps (2)-(4) at subsequent printing stations in said in-line process to achieve a desired opacity ink image on said substrate; and</li> <li>(6) printing an ink pattern over said flexographic ink using an offset lithographic process.</li> </ol> | <p>Printing machine in Figure 1<br/>Page 9, lines 11 - 20</p> <p>Page 12, lines 1 - 25</p> <p>Page 10, lines 28 to page 11, line 13</p> <p>Printing machine in Figure 1</p> <p>Page 9, lines 16 - 20; Page 9, lines 26 to 31; Page 6, lines 12 - 16</p> |
| 40. | <p>A method as in claim 39 further including the step of additionally printing colored ink images over said liquid ink image on said substrate at subsequent ones of said printing stations in said in-line process.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <p>Page 9, lines 16 - 20<br/>Page 9, lines 26 to 31<br/>Page 6, lines 12 - 16</p>                                                                                                                                                                       |
| 41. | <p>A method as in claim 40 wherein said liquid ink is an opaque white color.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <p>Page 7, line 34</p>                                                                                                                                                                                                                                  |

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**page 1**

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**CERTIFICATE OF SERVICE**

I hereby certify that the foregoing "Plaintiffs' Second Expert Designation and Reports" was served on Defendants' counsel by certified mail, return receipt requested and by hand delivery on November 17, 2000:

John P. Pinkerton

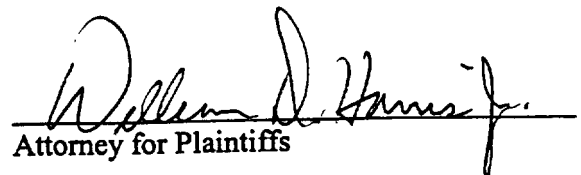
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**LEGAL EXPERT'S REPORT  
ON GERMAN UTILITY MODELS**

My name is Lars Manke and my curriculum vitae is attached. I am a partner with the patent law firm UEXKÜLL & STOLBERG and have 8 years experience in patent law and utility model law. I have been retained as an expert of witness by the law firm of LOCKE, LIDELL and SAPP. My compensation is \$ 200 per hour.

I, Lars Manke, hereby declare that:

In general, German utility models (Gebrauchsmuster) are similar to German patents. Like German patents, a German utility model contains a description, claims and drawings (no abstract is required). The maximum lifetime of a German utility model is 10 years, instead of 20 years for a German patent. Further, the definition of "inventive step" is slightly different.

Contrary to a German patent, a German utility model does not go through substantive examination but is registered upon passing the formal examination. Usually, the registration occurs between two and three month after the date of filing. The date of registration is published in the official PATENT GAZETTE (Patentblatt) and in the unofficial UTILITY MODEL BULLETIN (Auszüge aus den Gebrauchsmustern).

The publication of the unofficial UTILITY MODEL BULLETIN occurs on the same day the registration of the utility model is published in the official PATENT GAZETTE.

The publication of the registration of a German utility model in the official PATENT GAZETTE does not contain explicit

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details on the subject matter of the utility model; it shows the bibliographic data. The PATENT GAZETTE is the official publication of the German Patent and Trademark Office, and is printed by a publisher (Carl Heymanns Verlag) in Munich.

The unofficial UTILITY MODEL BULLETIN is printed and published by another publisher (WILA Verlag) in Munich. The UTILITY MODEL BULLETIN contains more detailed information, i.e. a drawing and claim 1 of the respective utility model.

Generally, both publications may be ordered directly from the publishers by any third party for whichever purposes. The PATENT GAZETTE is printed with a volume of approximately 700 copies per week, the UTILITY MODEL BULLETIN only with a volume of approximately 80 per week.

The unofficial UTILITY MODEL BULLETIN is available to the public through at least the German Patent Office, through the "Bayrische Staatsbibliothek" (Bavarian State Library) in Munich and through the "Deutsche Bibliothek" (German Library) in Frankfurt. Further, about 60 to 70 companies and law firms order the UTILITY MODEL BULLETIN for own inspection purposes.

The official PATENT GAZETTE is available to the public through several universities and other institutions who order the PATENT GAZETTE for own inspection purposes.

The German utility model G 93 05 552.8 with the German title "Einrichtung zum Inline-Beschichten von Bedruckstoffen in Offsetdruckmaschinen" (English title: "Device for in-line coating of printed materials in printing machines") has been filed on April 16, 1993. The date of registration was June 3, 1993. The registration has been published in the official PATENT GAZETTE and in the unofficial UTILITY MODEL BULLETIN on July 15, 1993.

From the date of the registration (June 3, 1993) of the above German utility model, a list was available at the German Patent Office, on which the publication number, the main class and the date of registration of all German utility models are cited which have been registered at that day (June 3, 1993) including the publication number, the main class and the date of registration of the utility model in question.

From the above date of registration, any third party had the opportunity to file a request for inspection of file for the utility model in question. This means, from the date of registration (June 3, 1993), any third party had the opportunity to get knowledge of the content of the above utility model in question.

As already mentioned, the publication of the registration of a German utility model in the official PATENT GAZETTE and the unofficial UTILITY MODEL BULLETIN occurs a few weeks after the registration thereof. This date of the publication of the registration (July 15, 1993) was the day when the above utility model was open to the public and could be inspected by any third party. There is no printed copy of the German utility model, but is on microfiche. However, any third party had the opportunity to order a printed copy of the whole specification of the above utility model from the German Patent and Trademark Office.

The above declaration and any oppinions herein are based on my knowledge of the German utility model law ("Gebrauchsmuster-gesetz"), my experience as a German patent attorney, my German patent practice, my knowledge of the German Patent Office and my knowledge of Carl Heymanns Verlag and WILA Verlag. I have not testified or given a deposition for the last four years.

Lawrence

(Lars Manke)



**LARS MANKE**  
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Munich, November 16, 2000

  
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(Lars Manke)

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19 BUNDESREPUBLIK DEUTSCHLAND

DEUTSCHES



PATENTAMT

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## Gebrauchsmuster

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Einrichtung zum Inline-Beschichten von  
Bedruckstoffen in Offsetdruckmaschinen

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**Einrichtung zum Inline-Beschichten von Bedruckstoffen in Offset-  
druckmaschinen**

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Die Erfindung betrifft eine Einrichtung zum Beschichten von Be-  
druckstoffen in Mehrfarben-Offsetdruckmaschinen mit mehreren  
Lackierwerken.

In der Zeitschrift FlexoDruck, 2-93, Seite 42-43, ist im Artikel  
"Goldlackdruck löst Metall-Bronzierung ab" angegeben, daß in einer  
Mehrfarben-Offsetdruckmaschine mit zwei sogenannten Lacktürmen eine  
Goldlackfarbe verarbeitet wurde. Dazu wurde ein Lackturm als  
Flexodruckwerk umgerüstet, wobei mit konventioneller Lackiertechnik  
eine Flexodruckplatte zum Beschichten eingesetzt wurde. Gegenüber  
der konventionellen Lackdosierung wurde auf die Option zur Verwen-  
dung eines Kammerrakels hingewiesen.

Ein Auftragswerk für hochviskose, ölhaltige oder niedrigviskose  
wasserlösliche Schichten ist aus der DE 3 906 648 A1 bekannt.  
Dieses Auftragswerk ist als Lackiereinrichtung, wahlweise als  
Offset-, Hochdruck- oder Tiefdruckwerk ausgebildet. Die Ausfüh-  
rungen gehen von einer strukturierten Schöpfwalze aus, die mit  
einem Rakelblatt korrespondierend bzw. von einer Auftragwalze und  
einem strukturierten Formzylinder, der mit einem Rakelblatt korre-  
spondiert. Das Hochdruckwerk besteht dabei aus einer mit Näpfchen  
profilierten Schöpfwalze, der ein Rakelblatt zugeordnet ist, einer  
Übertragwalze, der Glättwalzen zugeordnet sind und einem Form-  
zylinder mit Hochdruckform.

Aus der DE 4 122 990 A1 sind eine Bronze- und Effektdruckfarbe und  
ein Verfahren zur Herstellung eines Bronze- und Effektdruckes

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bekannt. Dort wird eine wasserverdünnbare Druckfarbe mit hoher Viskosität und hohem Pigmentanteil beschrieben. Diese soll aus dem Lackwerk einer Offsetmaschine oder einem Flexodruckwerk verarbeitet werden. Als Vorteil wird der kurze Verarbeitungsweg mit wenigen Farbspaltungen angegeben.

Beispielsweise aus der DE 3 614 582 A1 ist ein sogenanntes Kammer-  
raket zum Auftragen einer Beschichtungsmasse auf eine Beschich-  
tungswalze bekannt. Mindestens zwei, an einer Walze anliegende,  
Rakelblätter bilden eine Kammer zur Aufnahme einer Masse, die unter  
Druck zugeführt wird.

Aufgabe der Erfindung ist es, eine Beschichtungseinrichtung nach  
dem Oberbegriff des Anspruchs 1 weiterzuentwickeln, um auf einfache  
Weise eine problemlose Inline-Verarbeitung von schnellverdunstenden  
Druckfarben mit hohem Pigmentanteil bzw. groben Pigmenten kombi-  
niert mit weiterbehandelnden Druck- oder Beschichtungsvorgängen zu  
ermöglichen.

Gelöst wird die Aufgabe durch den kennzeichnenden Teil des Haupt-  
anspruches. Weiterbildungen ergeben sich aus den Unteransprüchen.

Die erfindungsgemäße Lösung gestattet es, das Inline-Beschichten  
mit höherviskosen Flüssigkeiten in einer Offsetdruckmaschine  
vorzunehmen unter besonderer Berücksichtigung von Lacken bzw.  
pigmentierten Farben auf Wasserbasis (Metallglanzdrucke). Einsatz-  
gebiete bestehen für ausgespartes Lackieren (Spotlackierung) oder  
vollflächiges Lackieren. Aufgrund der geschlossenen Kammer beim  
Kammerraket wird die Verdunstung der verwendeten Flüssigkeit  
reduziert. Dadurch wird die Verarbeitung von schnell verdunstenden,  
z.B. wasserlöslichen Flüssigkeiten verbessert. Die Kombination von  
mehreren Offsetdruckwerken und mindestens einem Flexodruckwerk kann  
in unterschiedlichen Anordnungen erfolgen, wobei diesen Einrich-  
tungen in der Regel eine weitere Lackiereinrichtung, z.B. zum  
vollflächigen Lackieren, nachgeordnet ist.

Die Erfindung wird im Folgenden beispielhaft erläutert. Dabei zeigt

Fig. 1 eine erste Einrichtung zum Beschichten und

Fig. 2 eine Variante der Einrichtung zum Beschichten.

In Figur 1 ist eine Mehrfarben-Offsetdruckmaschine mit zwei Lackiereinrichtungen gezeigt. Die Offsetdruckmaschine (hier ohne An- und Ausleger) besteht aus fünf Druckwerken 1 bis 5, daran in Bogenlaufrichtung angeschlossen einer als Flexodruckwerk 6 ausgerüsteten Beschichtungseinrichtung und einer dieser nachgeordneten herkömmlichen Lackiereinheit 7. Dabei kann das Flexodruckwerk 6 als Spotlackiereinrichtung (für ausgespartes Lackieren) und die nachgeordnete Lackiereinheit 7 zum vollflächigen Oberflächenfinishing eingesetzt werden.

Die Flexodruckwerk 6 wie auch die Lackiereinheit 7 bestehen aus je einem Druckzylinder 8.1, 8.2, einer Transfertrommel 9.1, 9.2 und einem Formzylinder 10.1, 10.2.

In der Flexodruckwerk 6 ist auf den Formzylinder 10.1 eine flexible Hochdruckplatte aufgespannt, zB. eine Flexodruckplatte. In Kontakt mit dem Formzylinder 10.1 ist eine Auftragwalze 11 mit strukturierter Oberfläche mit Rasternäpfchen, eine sogenannte Rasterwalze, angeordnet. An die Auftragwalze 11 anstellbar ist dieser ein Kammerrakel 12 zugeordnet. Das Kammerrakel 12 kann zB. an seiner Oberseite mittig mit einem Flüssigkeitszulauf und zwei austretende Flüssigkeitsabläufen im Bereich der Seitenteile versehen sein. Der Flüssigkeitszulauf ist mit einer Förderpumpe, die Flüssigkeitsabläufe 11 hingegen mit einer Saugpumpe verbunden. Die Pumpen sind erforderlich, um speziell durch die Pigmentierung höherviskose Flüssigkeit z.B. auf Wasserbasis, wie z.B. Gold- und Silberdruckfarbe, Deckweiß oder Lack, verarbeiten zu können.

Über die Rasternäpfchen der Auftragwalze 11 wird die Beschichtungsmasse zum Einfärben der Hochdruckform auf den Formzylinder

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10.1 transportiert und auf den vom Druckzylinder 8.1 zugeführten Bedruckstoff aufgebracht. Während des von der Auftragwalze 11 bewirkten Flüssigkeitstransports sorgt die Kammerrakel 12 dafür, daß die Flüssigkeit ausschließlich in den Rasternäpfchen verbleibt.

Die Lackiereinheit 7 weist demgegenüber eine Walzenpaar zur Bildung eines Dosierspalts auf. Dabei ist eine Dosierwalze 13 an eine Auftragwalze 14 angestellt. Die Beschichtungsmasse wird direkt in den Spalt zwischen beiden Walzen eingeführt und über die Auftragwalze 14 dem Formzylinder 10.2 zugeführt. Dieser trägt sie dann am Druckzylinder 3.2 auf den zugeführten Bedruckstoff auf.

Durch die Staffelung Offsetdruck, Flexodruck und Lackieren ist speziell für Metallglanz-Beschichtungen ein besonders gutes Arbeitsergebnis erzielbar. Dabei ist die Kombination von schneller Verarbeitung der leicht verdunstenden Metalldruckfarbe bzw. des Drucklacks mit einer nachträglichen, den Glanz erhöhenden Lackbeschichtung hervorzuheben.

Ein vergleichbares System ist in Figur 2 dargestellt. Hier ist das Flexodruckwerk 6 vor dem ersten Druckwerk 1 der Offsetdruckmaschine eingesetzt. Mit einer derartigen Konfiguration lassen sich Basisbeschichtungen vor dem Drucken aufbringen, z.B. Deckweiß-Beschichtungen auf Blechmaterial, Kunststoffolie oder Karton. Die abschließende Lackierung kann weiterhin dadurch ermöglicht werden, daß ein Lackierwerk 7 nach dem letzten Druckwerk 5 oder auch ein integriertes Lackierwerk an einem konventionellen Druckwerk angeordnet ist.

Vergleich ist auch eine Anordnung des Flexodruckwerkes 6 innerhalb der Offsetdruckmaschine zum Ausbringen von Zwischenbeschichtungen etwa mit Trocknungsfunktion.



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Ansprüche

- 1.) Einrichtung vorzugsweise in Bogenrotationsdruckmaschinen für mehrfarbigen Offsetdruck zum Beschichten von Bedruckstoffen mit wenigstens zwei Lackiereinheiten, dadurch gekennzeichnet, daß jede Lackiereinheit einen Druckzylinder (8), einen Formzylinder (10) und eine Auftragwalze (11,14) enthält und die entsprechend Bogenlaufrichtung vorgeordnete Lackiereinheit als Flexodruckwerk (6) ausgebildet ist.
- 2.) Einrichtung nach Anspruch 1, dadurch gekennzeichnet, daß im Flexodruckwerk (6) eine Auftragwalze (11) vorgesehen ist, an die ein Kammerrakel (12) anstellbar angeordnet ist, wobei die Auftragwalze (11) als Rasterwalze ausgebildet ist.
- 3.) Einrichtung nach Anspruch 1 und 2, dadurch gekennzeichnet, daß dem Flexodruckwerk (6) eine konventionelle Lackiereinheit (7) direkt oder indirekt nachgeordnet ist und in der Lackiereinheit (7) eine Auftragwalze (14) vorgesehen ist, der eine Dosierwalze (13) zur Bildung eines gemeinsamen Dosierspaltes anstellbar zugeordnet ist.
- 4.) Einrichtung nach Anspruch 1 und 2, dadurch gekennzeichnet, daß das Flexodruckwerk (6) aus folgenden Elementen besteht: dem, eine Hochdruckform tragenden Formzylinder (10.1), der mit dem Druckzylinder (8.1) in Kontakt steht, der Auftragwalze (11) mit Rasterstruktur, die mit dem Formzylinder (10.1) in Kontakt steht und dem Kammerrakel (12) besteht, das mit einer

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Förderpumpe zur Flüssigkeitszufuhr und einer Saugpumpe zur Flüssigkeitsrückführung verbunden ist.

- 5.) Einrichtung nach Anspruch 1 und 2,  
dadurch gekennzeichnet,  
daß das Flexodruckwerk (6) in einer Offsetdruckmaschine  
zwischen den Druckwerken (1-5) angeordnet ist.
- 6.) Einrichtung nach Anspruch 1 und 2,  
dadurch gekennzeichnet,  
daß das Flexodruckwerk (6) in einer Offsetdruckmaschine den  
Druckwerken (1-5) vorgeordnet ist.
- 7.) Einrichtung nach Anspruch 1 und 2,  
dadurch gekennzeichnet,  
daß das Flexodruckwerk (6) in einer Offsetdruckmaschine den  
Druckwerken (1-5) nachgeordnet ist.

| 1990 |  | 1991 |  | 1992 |  | 1993 |  | 1994 |  | 1995 |  | 1996 |  | 1997 |  | 1998 |  | 1999 |  | 2000 |  | 2001 |  | 2002 |  | 2003 |  | 2004 |  | 2005 |  | 2006 |  | 2007 |  | 2008 |  | 2009 |  | 2010 |  | 2011 |  | 2012 |  | 2013 |  | 2014 |  | 2015 |  | 2016 |  | 2017 |  | 2018 |  | 2019 |  | 2020 |  | 2021 |  | 2022 |  | 2023 |  | 2024 |  | 2025 |  | 2026 |  | 2027 |  | 2028 |  | 2029 |  | 2030 |  | 2031 |  | 2032 |  | 2033 |  | 2034 |  | 2035 |  | 2036 |  | 2037 |  | 2038 |  | 2039 |  | 2040 |  | 2041 |  | 2042 |  | 2043 |  | 2044 |  | 2045 |  | 2046 |  | 2047 |  | 2048 |  | 2049 |  | 2050 |  | 2051 |  | 2052 |  | 2053 |  | 2054 |  | 2055 |  | 2056 |  | 2057 |  | 2058 |  | 2059 |  | 2060 |  | 2061 |  | 2062 |  | 2063 |  | 2064 |  | 2065 |  | 2066 |  | 2067 |  | 2068 |  | 2069 |  | 2070 |  | 2071 |  | 2072 |  | 2073 |  | 2074 |  | 2075 |  | 2076 |  | 2077 |  | 2078 |  | 2079 |  | 2080 |  | 2081 |  | 2082 |  | 2083 |  | 2084 |  | 2085 |  | 2086 |  | 2087 |  | 2088 |  | 2089 |  | 2090 |  | 2091 |  | 2092 |  | 2093 |  | 2094 |  | 2095 |  | 2096 |  | 2097 |  | 2098 |  | 2099 |  | 2100 |  | 2101 |  | 2102 |  | 2103 |  | 2104 |  | 2105 |  | 2106 |  | 2107 |  | 2108 |  | 2109 |  | 2110 |  | 2111 |  | 2112 |  | 2113 |  | 2114 |  | 2115 |  | 2116 |  | 2117 |  | 2118 |  | 2119 |  | 2120 |  | 2121 |  | 2122 |  | 2123 |  | 2124 |  | 2125 |  | 2126 |  | 2127 |  | 2128 |  | 2129 |  | 2130 |  | 2131 |  | 2132 |  | 2133 |  | 2134 |  | 2135 |  | 2136 |  | 2137 |  | 2138 |  | 2139 |  | 2140 |  | 2141 |  | 2142 |  | 2143 |  | 2144 |  | 2145 |  | 2146 |  | 2147 |  | 2148 |  | 2149 |  | 2150 |  | 2151 |  | 2152 |  | 2153 |  | 2154 |  | 2155 |  | 2156 |  | 2157 |  | 2158 |  | 2159 |  | 2160 |  | 2161 |  | 2162 |  | 2163 |  | 2164 |  | 2165 |  | 2166 |  | 2167 |  | 2168 |  | 2169 |  | 2170 |  | 2171 |  | 2172 |  | 2173 |  | 2174 |  | 2175 |  | 2176 |  | 2177 |  | 2178 |  | 2179 |  | 2180 |  | 2181 |  | 2182 |  | 2183 |  | 2184 |  | 2185 |  | 2186 |  | 2187 |  | 2188 |  | 2189 |  | 2190 |  | 2191 |  | 2192 |  | 2193 |  | 2194 |  | 2195 |  | 2196 |  | 2197 |  | 2198 |  | 2199 |  | 2200 |  | 2201 |  | 2202 |  | 2203 |  | 2204 |  | 2205 |  | 2206 |  | 2207 |  | 2208 |  | 2209 |  | 2210 |  | 2211 |  | 2212 |  | 2213 |  | 2214 |  | 2215 |  | 2216 |  | 2217 |  | 2218 |  | 2219 |  | 2220 |  | 2221 |  | 2222 |  | 2223 |  | 2224 |  | 2225 |  | 2226 |  | 2227 |  | 2228 |  | 2229 |  | 2230 |  | 2231 |  | 2232 |  | 2233 |  | 2234 |  | 2235 |  | 2236 |  | 2237 |  | 2238 |  | 2239 |  | 2240 |  | 2241 |  | 2242 |  | 2243 |  | 2244 |  | 2245 |  | 2246 |  | 2247 |  | 2248 |  | 2249 |  | 2250 |  | 2251 |  | 2252 |  | 2253 |  | 2254 |  | 2255 |  | 2256 |  | 2257 |  | 2258 |  | 2259 |  | 2260 |  | 2261 |  | 2262 |  | 2263 |  | 2264 |  | 2265 |  | 2266 |  | 2267 |  | 2268 |  | 2269 |  | 2270 |  | 2271 |  | 2272 |  | 2273 |  | 2274 |  | 2275 |  | 2276 |  | 2277 |  | 2278 |  | 2279 |  | 2280 |  | 2281 |  | 2282 |  | 2283 |  | 2284 |  | 2285 |  | 2286 |  | 2287 |  | 2288 |  | 2289 |  | 2290 |  | 2291 |  | 2292 |  | 2293 |  | 2294 |  | 2295 |  | 2296 |  | 2297 |  | 2298 |  | 2299 |  | 2300 |  | 2301 |  | 2302 |  | 2303 |  |
|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|
|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|

030555Z

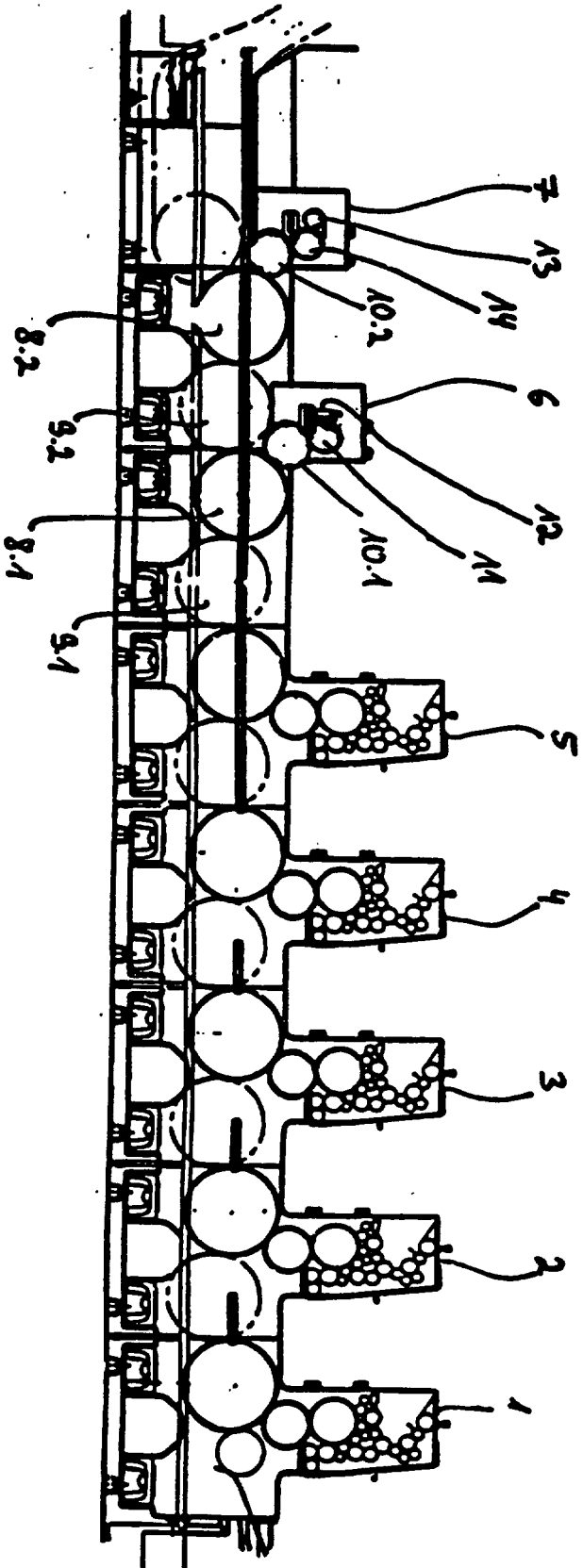


Fig. 1

20-40-21



20-40-21

[illegible]



atomen oder ein Terpolymere von Ethylen und Propylen und Butylen oder Ethylen und Propylen und einem anderen  $\alpha$ -Olefin mit 5 bis 10 Kohlenstoffatomen oder eine Mischung aus zwei oder mehreren der genannten Homo-, Co- und Terpolymeren oder ein Blend aus zwei oder mehreren der genannten Homo-, Co- und Terpolymeren ist und die Folie matt ist.

B 32 B - 27/40 91 16 632 A 41 D - 31/82

## Klasse B 41

B 41 F - 5/24 93 05 552 B 41 F - 7/06

⑤1 B 41 F - 7/06 ⑪ DE 93 05 552 U 1  
② 16.04.93 ④7 03.06.93 ④3 15.07.93

⑤4 Einrichtung zum Inline-Beschichten von Bedruckstoffen in Offsetdruckmaschinen

⑦1 MAN Roland Druckmaschinen AG, 6050 Offenbach, DE

⑦2 Marek, J., Dipl.-Ing., Pat.-Ass., 6053 Obershausen

⑤1 B 41 F - 5/24 B 41 F - 31/06

B 41 F - 9/10 B 41 F - 9/16

B 05 C - 1/08

⑤7 1. Einrichtung, vorzugsweise in Bogenrotationsdruckmaschinen für mehrfarbigen Offsetdruck, zum Beschichten von Bedruckstoffen mit wenigstens zwei Lackiereinheiten, dadurch gekennzeichnet, daß jede Lackiereinheit einen Druckzylinder (8), einen Formzylinder (10) und eine Auftragwalze (11, 14) erhält und die entsprechend Bogenaufrichtung vorgeordnete Lackiereinheit als Flexodruckwerk (6) ausgebildet ist.

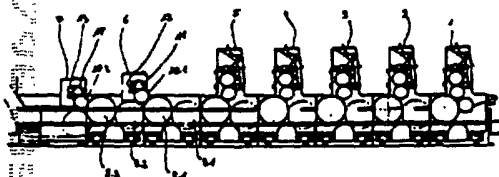


Fig. 1

B 41 F - 9/10 93 05 552 B 41 F - 7/06

⑤1 B 41 F - 9/10 ⑪ DE 92 18 039 U 1

② 25.04.92 ④7 03.06.93 ④3 15.07.93

⑤4 Rakelbalken für ein Kurzfarbwerk einer Rollenrotationsdruckmaschine

⑦1 Koenig & Bauer AG, 8700 Würzburg, DE

⑤7 1. Rakelbalken für ein Kurzfarbwerk einer Rollenrotationsdruckmaschine, welcher unterhalb einer Rasterwalze angeordnet und in vertikaler Richtung an den Rakelbalken anstellbar ist, und dessen Rakelblätter einen negativen Anstellwinkel aufweisen, dadurch gekennzeichnet, daß zumindest ein Rakelblatt (2) in einer rasterwalzenfernen Stellung gegen die Kraft von Federn (31) arretierbar ist.

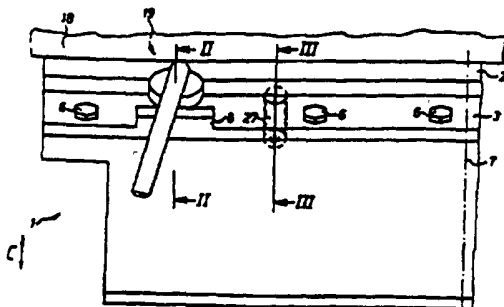


Fig. 1

⑤1 B 41 F - 9/10

② 25.04.92 ④7 03.06.93

⑤4 Einrichtung zum Festklemmen und Anstellen eines Rakelbalkens an eine farbabgebende Walze einer Rollenrotationsdruckmaschine

⑦1 Koenig & Bauer AG, 8700 Würzburg, DE

⑤1 B 41 F - 13/08

⑤7 1. Einrichtung zum Festklemmen und Anstellen eines Rakelbalkens an eine farbabgebende Walze, z.B. Rasterwalze, einer Rollenrotationsdruckmaschine, dadurch gekennzeichnet, daß ein drehbar in einer gestellfesten Rakelbalckenhalterung (22; 23) angeordneter Körper (24) eine abgewinkelte Gabel (26; 27) mit zwei Armen (26; 27) aufweist, daß in den Enden der Arme (26; 27) ein Bolzen (28) gelagert ist, auf dem ein zweiarmer Hebel (29) angeordnet ist, der an seinem ersten Ende einen Anschlag (31) und an seinem zweiten Ende einen Exzenter (32) aufweist, daß der Exzenter (32) gegen eine Frontseite (74) des Rakelbalkens (9 bis 13) preßbar ist, daß ein auf die Hinterseite (76) des Rakelbalkens (9 bis 13) wirkendes Druckfederstück (63) vorgesehen ist, daß ein hinterer Anschlag (23) als Gegenlager für den Rakelbalken (9 bis 13) angeordnet ist.

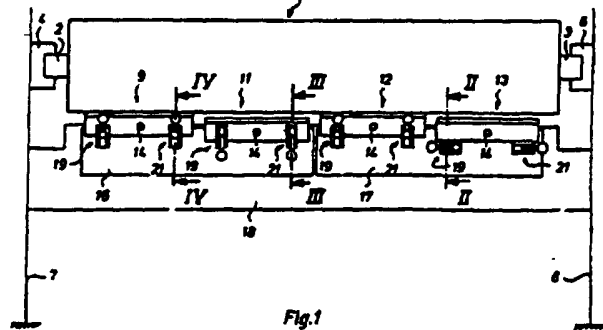


Fig. 1

B 41 F - 9/16 93 05 552 B 41 F - 7/06  
B 41 F - 13/08 92 18 053 B 41 F - 9/10  
B 41 F - 13/08 92 18 057 B 41 F - 13/10

⑤1 B 41 F - 13/08

② 21.04.92 ④7 03.06.93

⑤4 Vorrichtung zum Erzeugen eines druckenden Musters auf einer Druckform-Hülse

⑦1 Albert-Frankenthal AG, 6710 Frankenthal, DE

⑤1 B 41 F - 13/10

⑤7 1. Vorrichtung zum Erzeugen eines druckenden Musters auf einem Mantel einer Druckform-Hülse mittels einer Einrichtung zur Erzeugung von kleinen, Druckfarbe transportierenden Stellen auf dem Mantel, wobei die Druckform-Hülse auf einen Zylinder aufgefädelt wird, dadurch gekennzeichnet, daß ein innerer Umfang der Druckform-Hülse (4) größer als ein Durchmesser des Zylinders (8) ist.

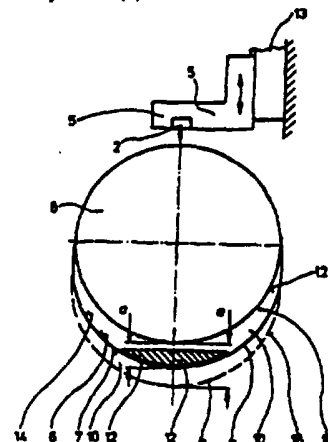


Fig. 1

B 41 F - 13/10 92 18 056 B 41 F - 13/08



GWK Gesellschaft Wärme Kältetechnik mbH,  
5883 Kierspe, DE

B29C 51/08 GM 92 15 136  
B31D 5/02  
B31F 1/12  
B31F 1/36  
B31B 43/00  
B31B 1/00  
B65D 65/40  
AT 06.11.92 ET 03.06.93 BT 15.07.93  
Akz: G 92 15 136.1  
Anlage zur Herstellung von Formkörpern  
aus einem verformbaren Folienmaterial  
o.dgl.  
LMG Rotopack GmbH, 7000 Stuttgart, DE  
R

B29C 51/42 GM 93 04 203  
AT 20.03.93 ET 03.06.93 BT 15.07.93  
Akz: G 93 04 203.5  
Vorrichtung zum Erwärmen von  
Tiefziehfolien  
Hemmerle Maschinen- und Werkzeugbau,  
7951 Tannheim, DE

B29C 65/60 GM 93 04 246 B21J 15/50

B29C 67/42 GM 93 02 413 B29C 43/48

B30B 9/30 GM 92 17 343  
B65F 1/14  
AT 18.12.92 ET 03.06.93 BT 15.07.93  
Akz: G 92 17 343.8  
Blechdosenverdrüchtungsmaschine  
Huber, Max, 8058 Erding, DE

B31B 1/00 GM 92 15 136 B29C 51/08

B31B 1/62 GM 93 04 390 B31F 1/26

B31B 43/00 GM 92 15 136 B29C 51/08

B31D 5/02 GM 92 15 136 B29C 51/08

B31F 1/12 GM 92 15 136 B29C 51/08

B31F 1/26 GM 93 04 390  
B31B 1/62  
B31F 1/28  
D21F 11/12  
AT 23.03.93 ET 03.06.93 BT 15.07.93  
Akz: G 93 04 390.2  
Pr 23.03.92 IT MI 92 U 000265  
Wellmaschine zur Herstellung von  
Wellpappe mit unterschiedlichen Profilen  
Ingg. Terzaghi & de Castiglione Industriale  
S.p.A., Cernusco sul Naviglio, Milano, IT  
Vtr: Manitz, G., Dipl.-Phys. Dr.rer.nat.;  
Finsterwald, M., Dipl.-Ing. Dipl.-Wirtsch.-Ing.,  
8000 München; Rotermund, H., Dipl.-Phys.,  
7000 Stuttgart; Heyn, H., Dipl.-Chem.  
Dr.rer.nat., Pat.-Anwälte, 8000 München

B31F 1/28 GM 93 04 390 B31F 1/26

B31F 1/36 GM 92 15 136 B29C 51/08

B32B 3/24 GM 93 03 118 B32B 11/10

B32B 7/12 GM 91 16 632 A41D 31/02

B32B 11/10 GM 93 03 118  
B32B 3/24  
B32B 27/06  
B32B 15/08  
D06N 7/00  
E04D 5/10  
E04B 1/66  
C09K 3/10  
AT 04.03.93 ET 03.06.93 BT 15.07.93  
Akz: G 93 03 118.1  
IP 05.02.93 DE 93 01 569.0  
Rollbare Abdichtbahn für insbesondere  
Dächer  
Roland-Werke Dachbaustoffe u. Bauchemie  
GmbH & Co KG, 2807 Achim, DE

B32B 15/08 GM 93 03 118 B32B 11/10

B32B 27/06 GM 93 03 118 B32B 11/10

B32B 27/12 GM 91 16 632 A41D 31/02

B32B 27/18 GM 93 05 684 B32B 27/32

B32B 27/32 GM 93 05 684  
B32B 27/18  
AT 17.04.93 ET 03.06.93 BT 15.07.93  
Akz: G 93 05 684.2  
Matte Transfermetallisierungsfolie  
Hoechst AG, 6230 Frankfurt, DE

B32B 27/40 GM 91 16 632 A41D 31/02

B41F 5/24 GM 93 05 552 B41F 7/06

B41F 7/06 GM 93 05 552  
B41F 5/24  
B41F 31/06  
B41F 9/10  
B41F 9/16  
B05C 1/08  
AT 16.04.93 ET 03.06.93 BT 15.07.93  
Akz: G 93 05 552.8  
Einrichtung zum Inline-Beschichten von  
Bedruckstoffen in Offsetdruckmaschinen  
MAN Roland Druckmaschinen AG, 6050  
Offenbach, DE

B41F 9/10 GM 92 18 039  
AT 25.04.92 ET 03.06.93 BT 15.07.93  
AT aus P 42 13 663.6  
Akz: G 92 18 039.6  
Rakelbalken für ein Kurzfarbwerk einer  
Rollenrotationsdruckmaschine  
Koenig & Bauer AG, 8700 Würzburg, DE

B41F 9/10 GM 92 18 053  
B41F 13/08  
AT 25.04.92 ET 03.06.93 BT 15.07.93  
AT aus P 42 13 670.9  
Akz: G 92 18 053.1  
Einrichtung zum Festklemmen und  
Anstellen eines Rakelbalkens an eine  
farbadgebende Walze einer  
Rollenrotationsdruckmaschine  
Koenig & Bauer AG, 8700 Würzburg, DE

B41F 9/10 GM 93 05 552 B41F 7/06

B41F 9/16 GM 93 05 552 B41F 7/06

B41F 13/08 GM 92 18 053 B41F 9/10

B41F 13/08 GM 92 18 056  
B41F 13/10  
AT 21.04.92 ET 03.06.93 BT 15.07.93  
AT aus P 42 13 013.1  
Akz: G 92 18 056.6  
Vorrichtung zum Erzeugen eines  
druckenden Musters auf einer  
Druckform-Hülse  
Albert-Frankenthal AG, 6710 Frankenthal, DE

B41F 13/08 GM 92 18 057 B41F 13/10

B41F 13/10 GM 92 18 056 B41F 13/08

B41F 13/10 GM 92 18 057  
B41F 13/08  
AT 21.04.92 ET 03.06.93 BT 15.07.93  
AT aus P 42 13 012.3  
Akz: G 92 18 057.4  
Rollenrotationsdruckmaschine - Druckwerk  
Albert-Frankenthal AG, 6710 Frankenthal, DE

B41F 16/02 GM 92 01 247 D06C 23/00

B41F 17/00 GM 93 03 439  
B41M 1/40  
AT 09.03.93 ET 03.06.93 BT 15.07.93  
Akz: G 93 03 439.3  
Tampendruckmaschine  
Tampoprint GmbH, 7015  
Kornthal-Münchingen, DE  
R

B41F 23/04 GM 91 16 646  
B41F 25/00  
AT 07.06.91 ET 03.06.93 BT 15.07.93  
AT aus P 41 18 807.1  
Akz: G 91 16 646.2  
Vorrichtung zur Erhöhung des  
Wärmeübergangs an Kühlwalzen von  
Offset-Rollenrotationsmaschinen  
Eltex-Elektrostatik GmbH, 7858 Weil, DE

B41F 25/00 GM 91 16 646 B41F 23/04

B41F 31/06 GM 93 05 552 B41F 7/06

B41J 2/435 GM 93 05 092 G03G 15/08

B41J 5/10 GM 93 02 619 G06F 3/023

B41L 11/00 GM 93 05 092 G03G 15/08

B41M 1/40 GM 93 03 439 B41F 17/00

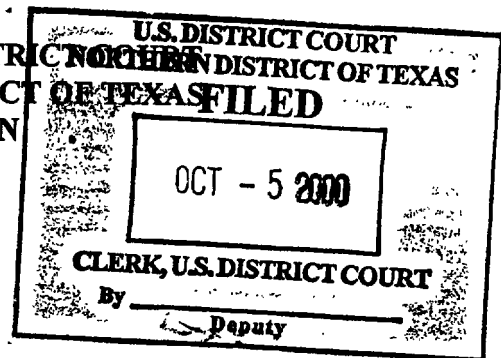
B42C 9/02 GM 93 04 504  
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AT 26.03.93 ET 03.06.93 BT 15.07.93  
Akz: G 93 04 504.2  
Radaufragergerät zum Auftragen von  
Klebstoff, insbesondere auf Buchrücken  
beim Buchbinden  
Nordson Corp., Westlake, Ohio, US  
Vtr: Eisenführ, G., Dipl.-Ing.; Speiser, D.,  
Dipl.-Ing.; Rabus, W., Dr.-Ing.; Brügge, J.,  
Dipl.-Ing., Pat.-Anwälte, 2800 Bremen



6340-94769

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IN THE UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF TEXAS  
DALLAS DIVISION



PRINTING RESEARCH, INC.  
and HOWARD W. DEMOORE,

Plaintiffs,

v.

WILLIAMSON PRINTING  
CORPORATION, BILL L. DAVIS and  
JESSE S. WILLIAMSON,

Defendants.

CIVIL ACTION NO. 3-99CV1154-M

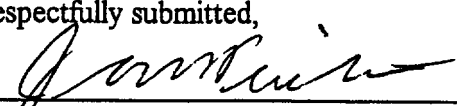
**DEFENDANTS' INITIAL DESIGNATION OF EXPERTS**

Pursuant to paragraph 5 of the Amended Scheduling Order and Rule 26(a)(2), Fed. R. Civ. P., Defendants designate the following expert witness who will testify at trial:

Bernarr R. Pravel, Esq.  
Akin, Gump, Strauss, Hauer & Feld, L.L.P.  
711 Louisiana Street, South Tower, Suite 1900  
Houston, Texas 77002

Attached hereto is a copy of Mr. Pravel's report dated October 5, 2000.

Respectfully submitted,

  
John P. Pinkerton  
Texas State Bar No. 1601670  
David P. Poole  
Texas State Bar No. 16123750  
Robert J. Ward  
Texas State Bar No. 00791879

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ATTORNEYS FOR DEFENDANTS

**IN THE UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF TEXAS  
DALLAS DIVISION**

**PRINTING RESEARCH, INC. and  
HOWARD W. DEMOORE**

**Plaintiffs,**

**v.**

**JESSE S. WILLIAMSON,**

**Defendant.**

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**Civil Action No. 3-99CV1154 - D**

**EXPERT WITNESS REPORT OF BERNARR ROE PRAVEL  
UNDER FEDERAL RULE 26(a)(2)(B)**

1. I make this report based upon my knowledge as to the factual matters set forth below and upon my own opinions as to matters set forth as such. If called as a witness in this case, I would testify as follows:

2. From 1970 to Dec. 31, 1998, I was the senior partner of the law firm Pravel, Hewitt, Kimball & Krieger, of Houston, Texas, specializing in the fields of intellectual property law and related antitrust fields. I was a partner and shareholder of that firm and predecessor firms since 1956. Since Jan. 1, 1999, I became senior counsel to Akin, Gump, Strauss, Hauer & Feld in Houston, Texas. I am admitted to practice before the United States Supreme Court, before the federal and state courts in Texas, before the United States Patent and Trademark Office, before the Court of Appeals for the Federal Circuit and in various other United States district courts and regional courts of appeal. I have substantial experience in the areas of patent prosecution and intellectual property licensing.

3. I am a Past-President of the American Intellectual Property Law Association (1983-1984). I was Chairman (1991-92) and Council Member (1977-1981) of the American Bar Association, Intellectual Property Law Section; Chairman (1970-71) of the National Council of Patent Law Association; Chairman (1968-69) of the Patent, Trademark & Copyright Section of the State Bar of Texas; Director (1976-79) of the State Bar Board of Texas; President of the Houston Intellectual Property Law Association (1983-84), and Vice-President (1973-74) of the Houston Bar Association.

4. My formal education includes the degree of Bachelor of Science in Chemical Engineering from Rice University (1947) and Juris Doctor with Honors from George Washington University (1951). I am a member of the following honorary societies: Tau Beta Pi (Engineering), Phi Lamda Upsilon (Chemistry) and Order of the Coif (Law).

5. I received the Chairman's 1989 Award of the State Bar of Texas Patent, Trademark & Copyright Section; the Houston Intellectual Property Law Association 1986 Award for Outstanding Service to the Profession; and the State Bar of Texas 1979 Award for Outstanding Contribution to the State Bar of Texas.

6. I am the author of articles in various law reviews and in the Journal of Patent and Trademark Office Society, publications of the Practicing Law Institute, and the American Patent Law Association Journal. I have presented lectures in the field of intellectual property law to various professional groups and conferences, such as the State Bar of Texas, the American Bar Association Intellectual Property Law Section, the Bureau of National Affairs, the University of Baltimore, the Houston Intellectual Property Law Association, the New Orleans Bar Association Intellectual Property Law Section, the Iowa Property Law Association and the National Council

of Intellectual Property Law Associations (National Inventor's Hall of Fame). A list of all publications authored by me within the preceding ten (10) years is attached as Exhibit A.

7. I have previously served as an expert witness on patent issues in over thirty litigation matters. A list of the cases in which I have testified as an expert at trial or by deposition within the preceding four (4) years is attached as Exhibit B.

8. I have had no previous professional or business connections with either of the parties in the present case, nor do I have any such connections at the present time. My professional fees for performing expert consulting are \$350.00 per hour.

9. In 1948-51 I was an Examiner in the United States Patent Office, during which time I examined applications for patents primarily in the chemical and mechanical fields. As a result of this experience and my practice as an attorney before the Patent Office since that time, I am familiar with the practices and procedures for filing and prosecuting applications for United States patents. I am an expert in patent law and procedure before the United States Patent & Trademark Office.

10. I have been asked to review the facts and the law concerning the issues whether Plaintiffs derived the '363 process from Defendants and whether or not Plaintiffs are equitably estopped to proceed with their claim of inventorship, coinventorship of the '363 process. I conclude that Plaintiffs DeMoore, Rendleman and Printing Research, Inc. derived the process of U.S. Pat. 5,630,363 ("the '363 process") from '363 applicants Davis and Williamson. Plaintiffs DeMoore and Rendelman are furthermore equitably estopped from asserting a co-inventorship claim or inventorship claim to the '363 patent, and are not entitled to joint-inventorship status.

11. In reaching the conclusions set forth below and in preparing to present the opinions set forth below, I have reviewed:

- A. U.S. Pat. 5,630,363 to Davis et al.;
- B. The **COMPLAINT** filed in this action on May 20, 1999;
- C. The **FIRST AMENDED ORIGINAL COMPLAINT** filed in this action on September 11, 2000;
- D. A joint declaration submitted under 37 CFR § 1.57(b) filed, in a reissue application by the '363 applicants Davis and Williamson, executed May 20, 1999;
- E. A joint declaration (i) under 37 CFR § 1.131 and (2) Pertaining to Derivation by DeMoore and Printing Research, Inc. of Reissue Applicants' process (hereinafter, "Joint Decl. Under § 1.131"), filed in the same reissue prosecution by reissue applicants Davis and Williamson and executed June 30, 2000;
- F. A patent application and the subsequent file history of United States Serial No. 08/435,798 filed May 4, 1995 by Printing Research, Inc. employees (and Plaintiffs herein) DeMoore and Rendleman, and additionally John W. Bird, encompass at least the time period from May 4, 1995 through November 23, 1998;
- G. The declaration of Steve Baker for the aforesaid reissue application, executed November 3, 1999 (WOO1248-WOO1252);
- H. The deposition of Steve Baker taken in this litigation on August 9, 2000, of 153 pages, and exhibits, and including a corrigendum executed by Baker on September 21, 2000 for said deposition;
- I. The declaration of Scott Brown (WOO1253-WO1257) for the aforesaid reissue application, executed December 30, 1999;

J. The deposition of Scott Brown taken August taken August 10, 2000 taken in this litigation, of 122 pages, and exhibits, and including a corrigendum executed by Brown on September 22, 2000 for said deposition;

K. The declaration of Steve Garner for the reissue application executed April 6, 2000 (WOO1299-WOO1303);

L. The deposition of Steve Garner for the litigation taken August 11, 2000, of 135 pages, and exhibits together, and including a corrigendum signed by Garner on September 21, 2000;

M. A declaration of John W. Bird for said reissue application executed December 11, 1999 (WOO931-WOO943);

N. A supplemental declaration of John W. Bird for said reissue application executed April 3, 2000 (WOO880-WOO929);

O. The first part of a deposition of John W. Bird taken September 12, 2000 in this litigation, of 299 pages, and exhibits;

P. Receipts of a trip to Atlanta by Jesse Williamson and Bill Davis (WOO-2705-002706);

Q. A supplemental declaration of Steve Baker executed October 5, 2000; and

R. A second supplemental declaration of John W. Bird executed October 5, 2000.

### **I. ISSUE OF DERIVATION**

12. The pertinent facts as to derivation are as follows: The '363 applicants, Bill Davis and Jesse Williamson of Williamson Printing Corporation ("WPC") conceived of the invention in June, 1992 upon Williamson's return from Germany to the United States. The

conception was inspired – at least in part – by Jesse Williamson’s observation of printing with an anilox roller at the coating tower (end-of-press) at the plant of German press manufacturer M.A.N. – Roland in Offenbach, Germany in late May, 1992. Joint Decl. Under § 1.131, ¶4.

13. Subsequently, in late '92 or early '93, WPC undertook an extended study to find out what presses WPC would purchase to replace its existing outdated presses. Until this study was completed and new press equipment was installed, it was not practical to reduce to practice the '363 process. Joint Decl. Under § 1.131, ¶4. A tentative decision was made in the late spring of 1994 by WPC to proceed with the purchase of a number of Heidelberg presses.

14. Steve Baker of Printing Research met with '363 patentees Bill Davis and Jesse Williamson in mid-1994 and received a disclosure from Williamson of their concept of moving a flexographic station “up front” in a lithographic press, together with several potential ways of performing same – preferably by a conventional “rack-back” mechanism modified for interstation use, and using an anilox roller and chambered doctor. Baker Decl., § 4, 7; Joint Decl. Under § 1.131, ¶6. It now appears from a recently produced receipt from Williamson -- WOO2705 -- that the meeting occurred on June 12, 1994.

15. At approximately the same time that Williamson and Davis told Steve Baker of PRI of their concept of going “up front”, they told salesman Scott Brown of Heidelberg USA of their concept. This followed Williamson’s continued oral commitment to Heidelberg to purchase a substantial amount of press equipment in June 1994. Brown Decl. ¶2 Williamson – Davis told Brown, as they had told Baker, of several different ways that going “up front” with a flexographic press could be accomplished. They wanted tests to perform or at least simulate their process to occur at Heidelberg in Germany. Brown Decl., ¶2.



16. When Baker came back to Dallas from the Atlanta area in mid-1994, he told PRI executives John Bird and Steve Garner of the process . Bird Decl., ¶9. As stated by Baker in his deposition:

A. I didn't see Howard DeMoore. *The first person I saw was John Bird when I got back.*

Q. Is it your testimony you told the first person you saw?

A. *No, I told the first person that had authority to hear it that I saw.*

Q. That what?

A. I told the first person that I had authority -- that had authority over me to hear it.

Q. Were you given a list of people that had a right to this information?

A. Of course not.

Q. Did you -- we may have misunderstood each other. *Did you ever tell Howard DeMoore this confidence?*

A. Yes.

Q. When?

A. I don't remember the exact day, but I remember talking to Howard on several occasions about what was going on at Williamson Printing. After all, Williamson was our customer. Howard ran the company. He needed to know.

Q. Did you tell him about the meeting and the discussion at the meeting?

A. I don't recall exactly doing that, but I know I did. I know we talked about everything that went on in Atlanta at one point or another with Howard, and I don't recall when I did that with Hoard. I don't recall seeing Howard upon returning to Dallas from Atlanta. I don't recall him being in the office at that moment. (Emphasis italics)

Baker Dep., p. 64, ln 5-p. 65, ln. 9. Specifically, Baker communicated to Bird and perhaps Garner the intent of Davis and Williamson to improve the WPC's prior art WIMS process (U.S. Pat. 5,370,976) by "going up front", together with the three options Brown Decl., ¶ 9. Baker, by recent declaration, testified that Bird and DeMoore were told of the '363 process invention on or about June 15-16, 1994 (Bird corroborates this testimony in his Second Supplemental Declaration, but pins the date down specifically to June 15, 1994):

"I have been shown travel receipts of Jesse Williamson, having production numbers W002705-2706, Exhibit "A" hereto. I note on document W002705 a reference to "Morton's Buckhead" restaurant for June 12, 1994. A calendar for June 1994, Exhibit "B" hereto, shows June 12<sup>th</sup> to be Sunday. I therefore met with Jesse Williamson and Bill Davis in Atlanta, Georgia on Sunday, June 12, 1994. As indicated in paragraph 4 of my prior declaration, the meeting was indeed on a Sunday. The rest of the Atlanta events I testified to in paragraphs 4-7 and the first sentence of paragraph 8 are accurate.

"The calendar and the receipt further refresh my recollection. I came back to Dallas several days later - either Tuesday the 14<sup>th</sup> or Wednesday the 15<sup>th</sup>, as I recall. The morning following my return, I met with John Bird in Bird's office. Jesse and Bill's desires presented quite an opportunity for PRI. I have a vivid recollection of this meeting, and I told Bird what Jesse and Bill had told me in the Morton's restaurant, as stated in paragraphs 5-7 and the first sentence of paragraph 8 of my prior declaration.

"I also recall telling Howard DeMoore, immediately after telling Bird, that Jesse and Bill desired to go "up front" with a modified "rack-back" having an anilox roller and chambered doctor. The trip to Atlanta was a high profile event inside PRI, and telling Bird and DeMoore of what went on there occurred immediately upon my return. DeMoore

needed to know – he ran the company. I believe I also told Steve Garner."

Note, also the deposition testimony of Bird:

Q. Okay. When did you first learn about the flexographic/lithographic in-line process as in the patent, Exhibit. 6?

A. The process?

Q. Yes, the process.

A. The process was first described to me after a visit of – that occurred somewhere in July of ninety – I'd have to look at my notes – it's July '94, wherein Steve Baker, who was at the time one of our sales people, had gone to Atlanta to demonstrate both UV, and had gone to demonstrate a high-velocity hot air drying system and a Plate/Blanket Coater to both Jesse Williamson and Bill Davis.

When – on Steve's return from Atlanta, Steve was somewhat excited to tell us that Williamson Printing had a patent pending, although that wasn't always clear to me whether it was pending or it was issued.

But certainly he talked of a process wherein WIMS, Williamson Integrated Metallic Systems, had been – certainly had a patent applied for as a process patent, and that Williamson Printing was looking at an improvement on that method of application with metallics, and that they and felt that the – and this was over a dinner meeting in the evening as sometimes happens in – in situations like this – and that they were looking for someone to work with them to produce a – a coater that would apply flexo, in particular, since they felt that a flexo would be a better way of applying and would give them a more brilliant finish.

And they had previously seen some trials wherein flexo had been applied with metallics that they felt that this, if we were interested – if they could find someone interested enough and since we made coaters, that we might be someone that could work with and/or sell them a piece of equipment to achieve the goal of applying metallics in-line as part of their process and their process patent as part of this improvement that they were looking for.

Bird Dep., p. 57, ln. 24 p. 59, ln. 12.

17. After Baker's return, Bird started frequent meetings with the '363 patentees - first meeting August 18, 1994 - whereby Bird was told the intimate details of the Davis - Williamson process. Bird Supp. Decl., ¶¶ 3-4.

18. There were many meetings in the late summer and early fall of 1994. See Garner Dep., p. 69, p. 108, on. 9; Bird Dep., p. 225, lns 2-11. In a number of these meetings, both Davis and Williamson attended. Bird Supp. Decl., ¶2.

19. PRI started in earnest the fabrication of an experimental "ferris wheel" (or cantilevered), interstation "rack-back" device to practice the '363 process in the late fall of 1994, specifically December, 1994. Bird Dep., p. 72, ln 16 - p. 75, ln. 14.

20. At the time that Baker told Garner and Bird of the Davis and Williamson "up front" concept, Garner was Vice President of Sales, and Bird was a Product Manager within the company.

21. The undersigned has been made aware that the earliest contention that DeMoore has of having the concept of going "up front" in a lithographic press with a flexographic step occurred on July 7, 1994, at a conference with his patent counsel.

22. This is several weeks later than the June 12, 1994 meeting with Baker. DeMoore has contended in both his original **COMPLAINT** (May 20, 1999) and his recently-filed **AMENDED COMPLAINT** that his and Rendleman's conception was "in 1994" (¶ 113), but mentions only that writings evidencing his conception started in December, 1994 (¶ 14):

"Beginning in 1994, DeMoore and Rendleman conceived of and began development of the Lithoflex® system. No later than October of 1994, Plaintiffs tested certain flexographic coating technology using a two-color Heidelberg lithographic press (the "pilot press") located at a Printing Research facility. The testing produced samples (the "flexographic samples") illustrating potential application of that technology. *No later than December 1994, Rendleman had reduced to drawings the concept of a printer/coater unit (the "Rendleman coater")*

*that would move on a retractable mechanism with a ferris-wheel-type motion. The mechanism permitted the printer/coater unit to easily convert an upstream lithographic station to flexographic printing for employing the Lithoflex® process and this made it possible for the practical application of such process.” (Emphasis supplied)*

23. Regardless, it is inconceivable that DeMoore was not told of the June 12, 1994 disclosure to Baker at the restaurant meeting in Atlanta by Garner and Bird, his subordinates. The fact that DeMoore was working within this company with Bird on the coater project is shown by the patent application that he, Bird and Rendleman subsequently filed on May 4, 1995, in which the Davis - Williamson “up front” concept was disclosed, but not claimed.

## **II. ISSUE OF EQUITABLE ESTOPPEL**

24. The pertinent facts as to the issue of equitable estoppel are as follows: The ‘363 applicants Davis and Williamson had a meeting with PRI representatives in January, 1995 at the offices of WPC in conference room “E”. At this meeting, Davis and Williamson told Baker and Bird of WPC’s intent to file an application on what came to be the ‘363 patent. Bird Decl., § 14. As testified to by Baker at his deposition:

Q. (By Mr. Harris) What do you say?

A. In response to where it says, Defendants admit that Bill Davis and Jesse Williamson informed Steve Baker and John Bird in January of ‘95 that WPC was going to file a patent application for ‘363, I – from this statement, I thought that was understood. That was the *WTMS II – [corrigendum]* patent that we’re always talking about and that it was either pending or they were going to file it; but at that point –

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Q. (By Mr. Harris) I would like for you to answer the question. The question is: Do you have a recollection of that happening? It’s a simple question.

A. I do remember them talking about their patent. Yes. See my testimony in paragraph 10 of my declaration, page 2. The testimony in paragraph 10 is correct.

Q. So what did they say?

A. In exact words, I don't remember.

Q. And when was it?

A. *It would have been January. It would have been after December, so it would have been January of '95.*

Q. (By Mr. Harris) You don't know what they're thinking, I guess, means that you don't know whether they're stating what happened or not, huh?

A. I don't have one opinion on that one way or the other, other than what I've already said. To me it was all the same. A patent was pending or they're going to file another one. *This time on WIMS II [corrigendum].* It was all the same to me. In '95 – in January of '95, if they told me they were doing that, I am assuming at that point it is the one we have already talked about in '94 and it just had not been filed yet.

Q. (By Mr. Harris) They didn't say the '363 process, did they?

A. They never named them by number because I probably didn't need to know the numbers. *How can they refer to '363 when they haven't filed yet? [corrigendum]*

Baker deposition, p. 136, line 7 to p. 141, line 6.

See also Bird Dep. p. 111, lns. 9-16:

Q. Okay. Tell us what was discussed in that meeting with Williamson and Bill Davis in regard to the flexo/litho process.

A. Jesse told us that they – they, Williamson Printing, were applying for a continuation, an extension, on the improvement on their present WIMS process patent, and that was to include flexographic applications.

In due course, Davis and Williamson filed a patent application, Serial No. 08/515,077, on August 14, 1995, that matured into the '363 patent.

25. PRI through owner, DeMoore and employees, Bird and Rendleman, filed a patent application on May 4, 1995, Serial No. 08/435,798, which did not claim the '363 process.

26. Subsequently, on June 11, 1996, PRI dropped process claims to a different process than claimed in Serial No. 08/435,798 without traverse, indicating that it did not give those process claims a high priority.

27. Serial No. 08/435,798 is still pending, with most claims rejected. From a review of the file history of Serial No. 08/435,798, at no time has DeMoore or PRI ever claim the '363 process since May 4, 1995. As the undersigned is advised, PRI did not indicate until March of 1999 that it considered that PRI employees were joint inventors of the '363 process, despite the fact that PRI was very active in the filing of patent applications, and only after PRI was not receiving the license terms it felt it deserved during negotiations early in 1999.

28. PRI has taken the position in its **COMPLAINT** and **FIRST AMENDED ORIGINAL COMPLAINT** that it did not know about the '363 patent until it was informed of that fact by a third party and potential customer – Hallmark – in December, 1998. Former PRI Vice-President Garner believes the true date was a year earlier “end of '97 or early '98”. (Garner, Dep., p. 115, ln. 11). Regardless, PRI took no position in the PTO or the courts to challenge the inventorship of the '363, having known of Davis and Williamson's intent to file a patent application since January of 1995, and failed to pursue claims to the '363 invention during a four-year, four-month pending of Serial No. 08,435,798, despite the fact that DeMoore has been represented in the prosecution of Serial No. 08/435,798 by no less than three very large Dallas law firms. DeMoore's apparent familiarity and experience with the patent system coupled

with his failure to claim the '363 process in any of his patent applications must be seen as acquiescence, if not an intentional abandonment.

### ANALYSIS

29. Derivation can be shown by a communication of a complete or partial concept to the party charged with derivation. Showing a prior, complete conception and communication thereof is not the only way to establish derivation. The burden of proof is on the party asserting derivation. That burden is independent of the senior or junior status of the parties. *Id. Hedgewick v. Akers*, 497 F.2d 905, 908, n. 4 (C.C.P.A. 1974). It is well settled law that once proved, transmission of an inventor's own prior work will not anticipate his later invention unless that prior work is such to constitute a statutory bar. *In re Costello*, 717 F.2d 1346, 219 U.S.P.Q. 389 (Fed. Cir. 1983); note also Chisum, 1 PATENTS § 3.08[2] (5/88). The burden is on the party asserting derivation by a preponderance of the evidence.

30. The evidence clearly shows that as of June, 1994, the '363 patentees were in possession of a comprehensive concept, if not a complete conception of the later-claimed '363 invention. The '363 patentees testified to as much. The '363 patentees chose to explore the possibilities of reducing to practice their concept either by use of a dedicated station – to be manufactured by Heidelberg, selling them a number of new processes – or by a modification of a prior art auxiliary “rack back” having an anilox roller and a chambered doctor.

31. That concept was communicated by the '363 patentees to Steve Baker in Atlanta in a restaurant on June 12, 1994, with the intent to induce Baker to explore the possibilities of his company manufacturing such a modified “rack-back.” Baker, upon returning to his office, told Bird, DeMoore and possibly Garner. Such corroborated transmission of the concept to PRI by the team of PRI employees admitted by PRI to have worked on PRI's apparatus to perform the



concept – Bird, Rendleman, and DeMoore, the applicants of Serial No. 08/435,798 – is sufficient to carry Defendants’ burden of proof as to derivation by a preponderance of the evidence. Hedgewick, supra; In re Mathews, 408 F.2d 1393, 161 U.S.P.Q. 1393 (CCPA 1969); and In re Kaplan, 789 F.2d 1574, 229 U.S.P.Q. 678 (CCPA 1986).

32. Equitable estoppel may apply where there is (1) unreasonable and inexcusable delay in filing suit, (2) prejudice to the defendant as a result of the delay, (3) affirmative conduct by the party against whom estoppel is asserted inducing the belief it abandoned its claim, and (4) detrimental reliance by the party asserting estoppel. Hottel Corp. v. Seaman Corp., 833 F.2d 1570, 1573, 4 U.S.P.Q.2d 1939, 1941 (Fed. Cir. 1987); MCV, Inc. v. King-Seely Thermos Co., 870 F.2d 1568, 1571 (Fed. Cir. 1989).

33. The ‘363 patentees communicated to PRI employees Bird and Baker in January, 1995 that they would file an application on what they considered to be their new, improved process. Bird testified that he considered the process to be that of the ‘363 patentees and made no objection.

34. The PRI team – Bird, Rendelman and DeMoore – filed their patent application on May 4, 1995 but did not claim the ‘363 process. In fact, at no time to date did they amend their claims in Serial No. 08/435,798, even within the one year period permitted by law after the issuance of the ‘363 patent on May 20, 1997, to copy any of the issued ‘363 claims. Significantly, former PRI Vice-President Garner testified that they knew about the ‘363 patent in late 1997 or early 1998.

35. Despite Garner’s testimony, DeMoore and PRI indicated in their COMPLAINT that they did not know about the ‘363 patent until December, 1998 and learned about it only through a potential customer. This contention lacks any credibility whatsoever, given

DeMoore's intense interest in patents, his interest in a device to practice the '363 process, his financial interest in the equipment to practice the process, and his financial losses alleged in his Complaint. I have had many small to medium-size clients who were manufacturing mechanical devices, and periodic review of the patent literature for competitive patents is commonplace. DeMoore's allegation of learning about the issuance of the '363 patent in December, 1998 is unbelievable.

36. Regardless, PRI's delay in pursuing any claim to the '363 invention or filing suit – of over four years – was unreasonable. MCV, *supra*. The first element of the Hottel test has been met.

37. Defendant WPC's only hope of realizing significant income from the '363 process – other than selling printed materials made according to the process – is by licensing the '363 process to others. As long as an inventorship fight hangs as a cloud over the '363 patent, licensing possibilities are remote, if not impossible. The second element of Hottel has clearly been not.

38. PRI, having been told of the forthcoming filing of the application for the '363 process in January, 1995 and having done nothing in 1995, 1996, 1997 or 1998 to copy the '363 claims, while at the same time continuing to do business with Defendants during that time period, including, but not limited to, the construction and delivery of interstation coaters and driers in 1995-1997, induced Defendants into reasonably believing PRI would not assert any claims of the '363 process. The third element of Hottel has been met.

39. Defendants acted to their detriment in relying on Plaintiffs' acquiescence concerning their failure to claim the '363 process. Defendants could have gone to any one of a number of different "rack-back" manufacturers to develop an alternative "rack-back" in 1995-

1998, which manufacturers were identified in the Garner and Bird depositions. Instead, the declaration and deposition testimony shows that Printing Research installed at least three interstation machines in the period 1995-1997, that Williamson paid for the machines manufactured for them at their request to perform the '363 process, and proceeded to try to work out their difficulties with Printing Research. The fourth and final element of Hogel has therefore been met. The letters attached to the Rule 57(b) declaration of '363 patentees indicated that PRI did not object to the identity of the '363 patentees as solely consisting of Williamson Printing Corporation employees Davis and Williamson until March, 1999 during license negotiations. After prosecuting Serial No. 08/435,798 for four years without claiming the '363 process, and after being told before they filed their application by Davis and Williamson that the latter would file an application on that process, plaintiffs are estopped to pursue claims of inventorship of the '363 process. MCV.

10. The opinions given herein are based solely on the testimony and other documents listed in item 11 above, which the undersigned has reviewed, and the undersigned reserves the right to change, to alter or to enhance his testimony upon the review of additional testimony or other documents.

October 5, 2000  
Date

B. R. Prave  
BERNARD ROE PRAVE

www.gutenberg.org


-1-

**CERTIFICATE OF SERVICE**

I hereby certify that the foregoing Defendants' Initial Designation of Experts with the attached report of Bernarr R. Pravel was served on Plaintiffs' counsel by hand delivering true and correct copies thereof to the offices of Plaintiffs' counsel on the 5<sup>th</sup> day of October, 2000, addressed as follows:

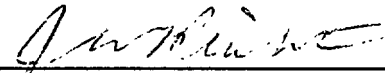
William D. Harris, Jr.  
LOCKE LIDDELL & SAPP, LLP  
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Respectfully submitted,

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**CERTIFICATE OF SERVICE**

The undersigned hereby certifies that a true and correct copy of the foregoing Defendants' Responsive Designation of Experts with the attached reports of Bernarr R. Pravel, was mailed by first class United States mail, postage prepaid, on this 17<sup>th</sup> day of November, 2000, to Plaintiffs' attorneys addressed as follows:

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FROM THE

TAYLOR

- 1 -

("NTAC")(in preparation for Texas A&M), now the University of Texas at Arlington, majored in mechanical engineering, and completed a two-year curriculum in engineering. I attended Southern Methodist University for five years from 1958-1963 and have more than 100 hours of credits, making As and Bs and concentrating in math and mechanical engineering. NTAC was only a two year college in the 1940s.

3. I have taken as many educational courses as possible (from junior high school through college - full and part-time - as well as continuing education classes) in drafting, mechanical drawing, mathematics, science, and engineering, with emphasis on mechanical and structural engineering and design. Special courses were also taken relating to hydraulics, pneumatics, fluid dynamics, manufacturing engineering, electrical, and computer technology. My early employment related to structural, machine and controls design. Later it has mostly been applications of low and high viscosity liquids in high-speed industrial machinery for the papermaking and converting industries; and in particular, to the printing industry on commercial sheet and web-fed lithographic offset printing presses, with the Dahlgren group of companies.

4. As my *curriculum vitae* states, I have had a continuous work history for over thirty-six (36) years at Dahlgren Mfg. Co., Dahlgren International Incorporated, Dahlgren U.S. A. Inc. (collectively "Dahlgren"), with extensive experience in the design and development of equipment for the graphic arts industry, primarily to meter and apply both high and low- viscosity inks and coatings to offset printing presses. With education plus experience, I consider myself to have more than an equivalent degree in Mechanical Engineering.

5. As Chief Engineer for Dahlgren Mfg. Co., I assisted Harold Dahlgren, founder, in further developing and commercializing the first continuous-duty dampener for all types of

lithographic press applications. Over the years, since the early sixties, more than one hundred thousand (100,000) such dampening systems have been placed on presses worldwide, with most still running today. All press manufacturers now offer either a Dahlgren dampener, a copy thereof, or similar "Dahlgren type" design as standard equipment, or at least as an option.

6. Dahlgren Mfg. Co. was the first company to offer a simple, highly efficient, multi-roll coating moisturizing or liquid application system ("LAS", below) for use on web applications by the paper-making and paper converting industries. I was responsible for the design and development of this system while I was Chief Engineer and later a Manager of Special Projects and Division Manager of Liquid Application Systems ("LAS") products. Hundreds of these machines were built to apply low-viscosity coatings and liquids to paper and board substrates - to 300 inches wide and to 5,000 feet per minute.

7. Dahlgren Mfg. Co. was also the first company in the world to develop and demonstrate a multi-color true "perfecting" (printing on both sides of the sheet at the same time) offset sheet-fed printing press. This was in the mid 1970's and 1980's. I supervised completion of the engineering design, assembly and testing of the press while I was Manager of Special Projects for Dahlgren.

8. Dahlgren Mfg. Co. was also the first to develop, demonstrate and commercially print with keyless inkers. I was responsible for the design and development of this inking system and was co-inventor on several patents on this system. "Keyless" inking is now being offered by some press manufacturers on special commercial sheet-fed offset printing presses as well as flexographic newspaper applications.

9. Finally, Dahlgren Mfg. Co. was the first company to place a coater inline on a lithographic offset printing press. This was in the early 1970's while I was manager of R&D of Dahlgren Mfg. Co. Now, some 30 years later, coaters have been designed for most all sheet-fed presses and some web presses, from 30" to 80" wide and running more than 1,800 feet per minute.

10. Dahlgren has sold several hundred coaters, most installed on sheet-fed offset lithographic printing presses. Most are placed in-line with printing functions, after printing and over wet ink, and most on existing presses. Virtually every sheet-fed press manufacturer now offers a tower coater, down-stream of printing functions, for applying coating in-line on new offset litho-presses.

11. Dahlgren has more coaters on in-place offset sheet-fed printing presses than all of their half-dozen competitors combined. Most, if not all, Dahlgren coaters are equipped to be retractable away from the press unit area where they normally operate.

12. I first became acquainted with coating in-line on a lithographic press in the mid-70's at Taylor Publishing Company in Dallas where we had an experimental keyless inker on the last unit of a 2-color offset (38" Harris) press. The conventional inker was replaced by our unit.

An infra-red (IR) or radio frequency (RF) dryer was in the delivery of the press. The coating was dried immediately. The inker worked very well and produced a beautiful coating, with high gloss and good scuff resistance, and further with a good cosmetic look and feel. This development eliminated the need for spray powder.

13. Later, in the late 70s to early 80s we placed a similar coater, as was supplied to Taylor Publishing Company, on our 4/C R&D perfecting press. We printed, in-line, three (3)

colors on one side of the sheet on the first three units and coated on the last unit over the wet ink and then immediately dried the ink and coating with an IR dryer and high-velocity air drying system, all developed by Dahlgren. At this time, on the above projects, I was Manager of Research and Development of Dahlgren Mfg. Co. and later became Vice President of R&D and Director of Corporate Technical Development.

14. I set-up a testing and demonstration laboratory in the mid 1980s in R&D to test different types of coaters, each using different coatings and substrates to determine requirements to provide optimum results for coating and drying. Single and two roll coaters were tested. Anilox roll coaters were tested with both a meter roll and later with a doctor blade as a metering member. The blade was used in both a wiping and a skiving (reverse) angle of attack to the anilox roll. The reverse angle is used in "chambered" doctor blade systems. The coaters in the lab were not retractable. Sketches of coaters with various retraction mechanisms are produced at Tab S18. Don Selby was a design engineer working for me in R&D who designed the different test coaters used in our test lab. Since we were not producing daily production on our 2/C 38" Harris lab/demo press in R&D, the single and two roll coaters installed on this press were not retractable, as previously stated. In order to actually sell units for production to printers, we were asked to begin thinking of "best mode" designs of retraction mechanisms which could be our standard type designs. Therefore Don and I made these sketches for our initial study.

15. Later, in the mid 1980s, we purchased the patent rights to Mark DiRico's horizontal retractable coater, called the "Hub Coater" (U.S. Patent No. 4,685,416) (W019373). Mark was working with the Hub Offset Company with his family who owned Hub Offset in Mansfield, Massachusetts. I helped prosecute the patent to allowance, working closely with

DiRico's patent attorney John Freeman at Fish & Richardson in Boston. A later vertically retracting coater was jointly designed and developed by Mark DiRico and Dahlgren's Phillip Rodriguez (U.S. Patent No. 4,825,804) (W019445), to not only horizontally move the coater, but also vertically move the coater, to a remote position away from the coater's normal position of operation. This allowed the operator complete access to the printing unit when the coater was not in use. The patent was assigned to Dahlgren International. Several hundred DiRico '416 and '804 coating systems with retraction devices have been sold worldwide.

16. In the late 1980s and early 1990s, Dahlgren developed an inclined retractable coater to enable simultaneous printing and in-line coating on the last unit of an offset lithographic press. This enabled printing and coating on a printing unit without sacrificing a printing unit. This development led to the issue of two (2) U.S. patents: Koehler, et al. U.S. Patent Nos. 4,934,305 and 5,178,678 (Tabs P58 and P67 respectively) (W019518 and W019629). Approximately 150-200 such coaters have been sold for use on Heidelberg, MAN-Roland and Mitsubishi presses.

17. During my 36 years at Dahlgren, I either provided original concepts, R&D designs, designs, design adaptations and/or design improvements on the following products for Dahlgren:

- (a) Dampering systems for lithographic presses:
  - Sheet and web-fed presses (offset & Di-Litho)
  - Metal decorator presses
  - Board presses
  - Forms presses

- Duplicator presses
- Coater/dampener for sheet-fed presses

(b) Coaters:

- Coater/dampener
- Reverse roll
- Silicon (blade)
- Blanket (single anilox roll w/blade and 2 roll)
- Liquid application system (L.A.S.) web
- Spec. off-line coating system

C. Moisturizers (2 and 3 roll):

- LAS - web
- Liquid application of cut sheets

D. Presses:

- Four (4) color simultaneous perfecting offset lithographic presses

E. Inkers:

- Keyless (single roll)
- Commercial and newspaper
- Flexo (coater/printers)

F. Other miscellaneous devices:

- 2<sup>nd</sup> unit color head (inker/dampener)
- Saturator vacuum dryer
- Oscillating form rolls/self-oscillating rolls



- Dampering fluid evaporation systems
- Hickey picker dampener

I believe the extensive and self-fulfilling work experience mentioned has prepared and provided me with the knowledge, expertise and credibility to be an "expert" in the use of coating and inking systems on printing presses.

**II.**  
**THE PRIOR ART TO U.S. PAT. 5,630,363**  
**WITH RESPECT TO ANILOX ROLL INKING/COATING SYSTEMS,**  
**ROLL METERING METHODS AND AUXILIARY RETRACTING SYSTEMS**

18. Attached hereto as group Exhibit B are lists of patents and literature that may form part of the prior art to the '363 patent, which I understand is in the process of being reissued. I have an extensive educational and work background relating to the design and development of these systems. The time period for the study presented is 1994 through mid-1995, back to at least the mid-1980s. Anilox rolls associated with their metering devices are discussed. A detailed "matrix", attached as Exhibit C, is provided for various types of retraction devices used with certain coaters and inkers. Each device is coupled to either an issued patent, published brochure or to design sketches by those having ordinary skill in the art of the auxiliary printing equipment.

19. Commercial inking and coating systems as of 1994-1995 consisted largely of one or more rolls rotating at high surface speeds with high centrifugal forces, resulting from small diameters and large revolutions per minute (RPMs). Rolls were normally in contact with adjacent rolls and rotated together at the same or slightly different surface speeds. An inker on an offset press for hi-viscosity liquids may have had as many as twenty or thirty rolls, where in an

application of low-viscosity liquids, from only one to three rolls may suffice. The liquid inks for lithographic offset presses were at that time, and are now considered hi-viscosity (buttery or sticky and stiff). Liquid inks for flexographic presses are fluid, shear readily and are normally relatively thin. Generally, protective and decorative coatings are used on either type of press, whether offset or flexographic, and are considered low-viscosity.

20. To properly apply a desired thickness of ink or coating to a paper or plastic substrate, one is required to use different metering methods for the low and high-viscosity liquids (this study relates primarily with low-viscosity inks and coatings, and particularly to flexographic-type inks, and to coatings for applications on flexo or offset presses). Only one to three roll inkers or coaters are, therefore, referred to in this report.

A.

The prior art with respect to the  
'363 patent: Anilox Roll Inking / Coating Systems

21. In 1994-5, as is true today, a single or one roll inker or coater, where the roll used has an engraved surface (with pits or cells holding the liquid), is referred to as an "anilox roll" inker or coater. The word anilox is derived from the word aniline and especially aniline dye (made from aniline, which is an "oily liquid obtained from coal tar and especially from nitrobenzene used in making dyes and perfumes, in certain medicines in plastics, in resins, etc.") and therefore, low-viscosity fluid and fast drying. The quoted reference comes from The World Book Dictionary (Thorndike-Barnhart, Vol. 1 © 1974). Liquid ink or coating was metered in 1994-1995, as it is today, from the engraved surface by either of two (2) methods:

1. (First Metering Method)  
With doctor (scraping or shearing) blade or blades

22. Open fountain: A single blade may be used to remove most of the liquid from the surface of a roll by scraping (or wiping) the roll using pressure on the roll at the blade's edge, and placing the blade at a certain angle to a line tangent to the surface, where the edge touches the roll. A single blade may also be used to remove virtually all of the liquid from the roll's surface by shearing liquid at the blade/roll interface by placing the blade at a reverse angle from the wiping angle described above, and using only light pressure to the surface. A reversible blade has some advantages over a wiping blade, especially at high surface speeds. A wiping blade tends to leave some ink or coating on the roll's surface and increases in thickness due to hydroplaning of the blade at high speeds. Whether a wiping or reverse angle blade is used, the fountain or reservoir of liquid created at the blade / roll interface is exposed to ambient air, and is said to be an "open" fountain.

23. Enclosed fountain: An "enclosed" fountain can be obtained by using a *chambered doctor blade* system where two blades are used and spaced apart, one a wiping blade and one a reverse angle blade, forming a chamber therebetween. The chamber is encompassed by these two blades, the surface of the roll and the blade holder itself. End seals are provided at the ends of the roll and seal the coating from leaking. Thus, an "enclosed" cavity or chamber exists, where ink or coating may be circulated to and through the chamber, while a small amount is carried away by the cells engraved into the anilox roll's surface. The wiper (wiping) blade serves to seal one side of the chamber, while the reverse angle (working) blade seals and removes virtually all the liquid from the surface of the roll. Ambient air is therefore prevented from

entering the cavity to cause bubbles, foaming and/or streaks and skips due to cavitation. Air can be brought into the chamber only by empty cells, or from entrained air in the coating being pumped to the chamber inlet. This system is well adapted for high-speed applications as described above and is normally more compact and "user friendly" than an "open" fountain system.

24. Several such "enclosed" (chambered) doctor blade systems are shown and/or described in both U.S. and foreign patents, especially the following items (see group Exhibit B): Patent No. EP 0 293 586 A2 (Tab P40), U.S. Patent No. 4,685,414 (Tab P41), U.S. Patent 4,796,528 (Tab P46), U.S. Patent 4,821,672 (Tab P49), U.S. Patent No. 4,934,305 (Tab P58), Patent GB 22 63 438 A (Tab 62), U.S. Patent No. 5,176,077 (Tab P66), U.S. Patent No. 5,178,678 (Tab P67), U.S. Patent No. 5,209,179 (Tab P69), U.S. Patent No. 5,335,596 (Tab P71) and Patent No. DE 43 11 834 A1 (Tab P72). These patents describe use of such systems in flexographic inking, as well as coating applications on offset lithographic printing presses. Of the eleven (11) patents mentioned, approximately two-thirds are coating applications on offset presses, with the remaining being inking applications on flexographic presses. The issue dates on these patents range from the late 1980s to the mid 1990s, though chambered doctor blade systems used with anilox rolls were already well-known.

2. (Second Metering Method)  
With smooth resilient surfaced roll

25. Prior to the use of doctor blades against engraved anilox rolls, a resilient smooth surfaced roll was placed in pressure contact with the anilox roll, and made to rotate at a slower surface speed to remove most of the ink from the roll's surface. Again, the system was described

as an "open" fountain as opposed to "enclosed". "Open" fountains left unwanted ink on the roll's surface which was unacceptable for printing fine screens and was generally cumbersome to use, hard to adjust and difficult to clean. Therefore, doctor blades have replaced metering rolls, almost entirely, to efficiently remove excess ink or coating from engraved anilox roll surfaces. One of ordinary skill in the art would be expected to know about the prior art relative to smooth resilient rolls, as opposed to resilient engraved anilox rolls such as that alluded to in DeMoore et al. Serial No. 08/435,798, discussed below.

26. Several anilox roll applications are shown and described in both U.S. and foreign prior art patents provided herewith, and numbered: U.S. Patent No. 2,333,962 (Tab P3), U.S. Patent No. 3,604,350 (Tab P9), U.S. Patent No. 4,165,688 (Tab P17), U.S. Patent No. 4,308,796 (Tab P20), U.S. Patent No. 4,586,434 (Tab P36), Patent No. EP 0293 586 A2 (Tab P40), U.S. Patent No. 4,685,414 (Tab P41), U.S. Patent No. 4,796,528 (Tab P46), U.S. Patent No. 4,821,672 (Tab P49), U.S. Patent No. 4,825,804 (Tab P50), U.S. Patent No. 4,934,305 (Tab P58), Patent No. GB 2,263 438 A (Tab P62), U.S. Patent No. 5,176,077 (Tab P66), U.S. Patent No. 5,178,678 (Tab P67), U.S. Patent No. 5,209,179 (Tab P69) and U.S. Patent No. 5,335,596 (Tab P71). These patents describe use in flexographic printing as well as coating applications on offset presses. Of the sixteen (16) patents mentioned, approximately 60 percent of them are used on offset presses, with the remainder on flexo presses, with both inking and/or coating applications. Dates on these patents range from the early forties to the mid-nineties.

B.

The prior art with respect to the '363 Patent  
Retraction Systems for Inkers and Coaters as of 1994-5

27. Retraction devices and systems for inkers, and especially coaters attached to printing presses, are primarily used to relocate the inker or coater to a remote location from its normal operating position on the press. This allows access to the press, press unit and/or press cylinder, for use in its normal fashion by a press operator. Some semi-fixed systems, or rolls thereof, are removable to also provide access to certain press areas. The earliest of such devices and systems shown date back to the early forties. Major developments, however, were made between 1980 and the early 1990s.

28. Numbered "Prior Art Brochures", including "Early Retraction System Designs and Patents" and "Prior Art Patents" are listed in group Exhibit B. Some are referred to in the matrix of Exhibit C, numbered in chronological order with the prefix "B" for brochure, prefix "S" for sketch and prefix "P" for patents. This matrix is a chart showing retractable liquid application systems; namely, inkers and coaters. The matrix primarily shows whether the applicator in the patented device is used in-line with printing functions or off-line, away from the printing press. The type of press is also shown, plus types of systems providing access to the press during times when the applicator is not being used; i.e., when printing only functions are performed. The matrix further shows where on the press the applicator is being applied, the liquid being used, and other miscellaneous information. Codes are shown to indicate whether the substrate used in the press is a sheet or web, whether the applicator is a single or multiple roll system and what type of retraction device is provided.

29. The retraction column has been highlighted to readily enable one to identify the type of retraction system that is used with a particular prior art brochure, sketch or patent. The following is a general description of each retraction code shown in the matrix of Exhibit 3.

30. **Type "I" (Inclined).** This type of retraction provides for direction and force to move the applicator up an inclined plane, up and away, from where the applicator is located in its normal operating position. The force can come from one (1) of several mechanisms; i.e. electric or hydraulic winch, jack-screw, ball nut, hydraulic cylinder, rack and pinion and the like. Some inclines are at about 30 degree angles, some 45 degrees and others at even 60 degrees. In most cases, the movement is far enough away from its working position to allow an operator complete access to the area where he must work from time to time; such as when the press is down, or when the press is used without the applicator.

31. The earliest date of use for this type of retraction shown is seen to be in the mid-1980s. These are numbered: IBC (Tab B3), U.S. Patent No. 4,617,865 (Tab P38), Oxy-Dry (Tab B6), Dahlgren-LPC (Tabs B10, 11), U.S. Patent No. 4,934,305 (Tab P58), EpicBC (Tab B12), U.S. Patent No. 5,107,790 (Tab P64), U.S. Patent No. 5,178,678 (Tab P67), System Designs (Tab S18) and Rapidac (Tab B8). Historically, most of these devices were used on offset sheet-fed presses, with blanket or impression cylinder coaters after the last printing unit. Several hundred of such coater retraction systems are still in use in the United States and are still marketed by several different manufacturers.

32. **Type "H" (Horizontal).** This type of retraction provides for direction to allow the applicator to move substantially horizontal away from where the applicator is located in its normal operating position. The force required is normally minimal and usually an operator can

move the coater manually. In most cases, the movement is far enough away from its working position to allow an operator access to the area where he must work from time to time; such as when the press is down, or when the press is used without the applicator.

33. The earliest date of use for this type of retraction shown is seen to be in the early seventies and gained popularity in the eighties and nineties. Type "H" is commercial and is sometimes referred to as the "DiRico Type" or the "Hub Type." These are numbered: U.S. Patent No. 3,604,350 (Tab P9), Dahlgren CP (Tab B4), U.S. Patent No. 4,685,414 (Tab P41), U.S. Patent No. 5,107,790 (Tab P64) and Dahlgren BC (Tabs B5,7,9). Historically, most of these devices were used on offset sheet-fed presses with blanket coaters after the last printing unit. Another use is on a flexographic press using flexo inks. Several hundred of such coater retraction systems are still in use and are still being marketed by one or more manufacturers.

34. **Type "V" (Vertical).** This type of retraction provides for direction and force to move the applicator substantially vertical, away from where the applicator is located in its normal operating position. The force required is often substantial, to lift the applicator nearly straight up for several feet. Here again, like the inclined retraction, the force can come from one of the several types listed for the inclined device; or, maybe as simple as a chain hoist, either electrically or manually operated. In most cases, the movement is far enough away from its normal position to allow an operator complete access to the area where he must work from time to time; such as when the press is down, or when the press is used without the applicator. The earliest date of use for this type of retraction shown is seen to be in the early nineties. The only one shown is numbered as IVT (Tab B15). This device is used on offset sheet-fed presses with



blanket coaters on the last printing unit. The design, though practical, is not as popular as the inclined or horizontal retraction device.

35. Type "F" ("Ferris"). This type of retraction provides for pivotal movement of arms supporting the applicator and force (torque) to move the arms through several degrees of rotation about a fixed pivot, at one end of the arms. The applicator, supported on opposite ends by the arms, moves up and away from its normal operating position. In most cases, the movement is far enough away from its normal working position to allow an operator complete access to the area where one must work from time to time; such as when the press is down, or when the press is used without the applicator.

36. Although desirable, but not absolutely necessary, the applicator should maintain or substantially maintain its normal position (i.e., not rotate) relative to the press. Therefore, it becomes desirable that the applicator be pivotally attached to the opposite end of the rotatable arms to maintain its normal horizontal position relative to the press. This ensures that the applicator remains substantially horizontal as it also swings about the fixed pivots, usually attached somewhere on the press. When the rotatable arms allows the applicator to remain substantially horizontal, the movement is sometimes called "Ferris" like a "Ferris Wheel" at the fair. A "Ferris Wheel" is described in The World Book Dictionary (Thorndike-Barnhart) © 1974, pg. 773, as "a large, revolving wheel with seats hanging from its rim, used in carnivals, amusement parks, etc. (American English, George W.G. Ferris, 1859-1896, an American Engineer, The Inventor.)".

37. The earliest date of use for this type of retraction shown is seen to be in the mid-to late eighties. These shown are numbered as: U.S. Patent No. 4,889,051 (Tab P55) and

Systems Designs (Tab S18). I considered building such a "ferris wheel" coater in the early 1980s. This device is used on offset sheet-fed presses with blanket inkers or blanket coaters. U.S. Patent No. 4,889,051 (Tab P55) shows an application wherein the applicator to be retracted is simply moved on top of the printing unit to which it applies liquid. Also, U.S. Patent No. 4,889,051 (Tab P55) shows application where the applicator can apply ink to select cylinders in the press; that is, at two (2) different levels of a press unit. The DiRico et al. U.S. Patent No. 4,685,414 (Tab P41, col. 1, lines 38-43) and the Koehler et al. patents, U.S. Patent No. 4,934,305 (Tab P48, col. 1, lines 46-52) and U.S. Patent No. 5,178,678 (Tab P57, col. 1, lines 52-58) all reference a "pivoting arm" coater by Norton Burdett Co. of Nashua, N.H. DiRico is known to have improved the Burdett coater to eliminating the "bumping" and streaking problem by the mid-1980s.

38. **Type "T" (Transverse)**. This type of retraction provides for direction to allow the applicator to move not only horizontal, but also transversely across the press, to one side of the press. Normally the applicator simply rolls onto an awaiting cart where it can be moved completely away from the press. Like the horizontal retraction, only a small force is required to move the applicator.

39. The earliest date of this type of retraction shown is seen to be in the late 1980s. The only one shown is numbered as U.S. Patent No. 4,779,557 (Tab P45). This device is used with offset sheet-fed press blanket coaters on the last press unit. The design does not have the popularity as some of the others.

40. **Type "FB" (Four (4) Bar-Linkage)**. This type of retraction has two (2) rotatable, usually identical, parallel bars (arms) which pivot and rotate from fixed pivot points

located on both sides of the press. The opposite ends of the bars are pivotally attached to the applicator. The pivots, and therefore bars, are substantially spaced several inches from each other. The press and the applicator frames actually become the third and fourth bars respectively -- hence, a "four (4) bar linkage." The rotatable bars are normally substantially horizontal, until rotated to a nearly vertical position. This rotation lifts the applicator and allows it to move up and away from its normal operating position. An advantage of a "four bar linkage" device is the rigidity of the arms supporting the carriage. Like the other retraction devices described above, in most cases the rotation carries the applicator far enough away from its normal working position to allow an operator complete access to the area where he must work from time to time; such as when the press is down, or when the press is used without the applicator.

41. The earliest dates of use of this type of retraction shown is seen to be in the mid-eighties. The ones shown are numbered as: Systems Design (Tab S18) and Rapidac (Tab B8). This device is used on offset sheet-fed presses with blanket coaters after the last printing unit. Several such designs are in use today and may be offered by more than one (1) manufacturer. Rapidac is known to have sold a number of Type "FB" coaters.

42. Type "X/Y" (Combination). The slash mark between the X & Y indicates the combination of two different retractions; **I/H** indicates the combination of two different devices, inclined retraction and the horizontal retraction types; **H/V**, the combination of the horizontal and vertical; **I/V**, the combination of inclined and vertical, and so forth. The first letter generally indicates the first movement away from the normal working position of the applicator head, relative to the press. Here again, the combination of retraction movements carries the applicator head far enough away from its working position to allow an operator complete access to the area

where he must work from time to time; such as when the press is down, or when the press is used without the applicator.

43. The earliest date of use for these types of "X/Y" retractions shown is seen to be in the late eighties. The several types shown are numbered as follows:

**I/H** - U.S. Patent No. 4,841,903 (Tab P51), U.S. Patent No. 4,796,556 (Tab P47), and PRI (Tab B13)

**H/V** - U.S. Patent No. 4,825,804 (Tab P50)

**I/V** - U.S. Patent No. 5,209,179 (Tab P69)

**V/H** - Systems Designs (Tab S18)

**H/I** - IVT (Tab B15)

Most of these combination type retraction devices were used on offset sheet-fed presses with blanket and/or plate coaters on the last printing unit. Like the inclined and horizontal retraction devices, I believe several hundred of the *combination systems* are in use today and are offered by one or more manufacturers.

44. All the above retraction systems perform basically the same functions: to remove the applicator head to a remote location away from its normal working position on the press, and to allow the pressman safe access to his normal working area, when necessary. After retraction, it is very important that all the applicator heads return to their exact original position, relative to the roll or cylinder to which they were originally set. Therefore, it is most important that the retraction devices, as well as the coatings or inkers being retracted are designed to be as rigid and stout as possible to withstand the high shock forces imposed upon them at high press speeds, often reaching 15,000 impressions per hour.

45. I read Davis and Williamson's Memorandum Concerning the Prior Art and Position on Patentability ("Memorandum") (W014812 A-AA) to the U.S. Patent and Trademark Office submitted on April 7, 2000. The text concerning retraction systems mentioned in the Memorandum (pp. 6-9) was, if anything, understated (see paragraph 28-44 above). In hindsight, I would have added mention of the Satterwhite patent, U.S. Patent 4,308,796 (W019183-W019192). Satterwhite teaches the retraction of an auxiliary unit to engage the blanket cylinder. Nowhere does it teach, let alone mandate, interstation construction of such a unit. One skilled in the art of the 1980s, upon reading Satterwhite '796, would not have interpreted it as an interstation teaching.

### **III. QUESTIONS ASKED ME**

46. I have been asked the following questions:

(a) What was the state of the art from May, 1992 - June, 1994 with respect to:

- (1) Retractable coaters?
- (2) Anilox rollers?
- (3) Chambered doctors?

(b) Did WPC provide sufficient information to PRI in mid June, 1994 (Baker, Baker Supp., Bird, Bird Suppl., Bird 2d Suppl. Declarations) for a person of ordinary skill in the art of making auxiliary printing equipment to make an interstation flexo unit for use in the flexo/litho process of the '363 patent? If not, was it sufficient by the end of 1994 after transmission of additional information to Bird (See Bird Suppl. Ded., ¶¶ 3-5)?

(c) With respect to PRI's developmental drawings of interstation printer/coater options:

- (1) linear rack back (disclosed in their drawing of 12/5/94), and
- (2) cantilevered device (12/5/94 and 12/30/94)

were these drawings, alone, sufficient to teach one of ordinary skill at that time of the '363 process? If not, did any of the December PRI drawings do so, alone or in combination?

(d) Does application Serial No. 08/435,798, as filed, enable one of ordinary skill to practice the '363 process?

(e) Did Bill Davis and Jesse Williamson have a conception in June 1992 - which I understand is a concept so complete and well defined that it could be reduced to practice when told to one of ordinary skill in the art and without undue experimentation?

(f) Did the concept of Davis and Williamson as described by them to Bowyer in 1992 and subsequently to Baker and Bird in 1994 embrace the retractable flexo unit shown in Fig. 2 of the '363 patent?

(g) Do any of the claims of Serial No. 08/435,798 as originally filed, cover Davis and Williamson's process?

(h) Do any of the claims of Serial No. 08/435,798 as originally filed, cover the device of Fig. 2 of the '363 patent?

(i) Do any of the claims of Serial No. 08/435,798 as those claims exist now before the PTO cover the Davis and Williamson process?

(j) Do any of the pending claims of Serial No. 08/435,798 cover the apparatus of Fig. 2? If so, are those claims within the prior art?

(k) Was PRI's development of the cantilevered or ferris wheel interstation device in 1994-1995 reasonable? Was the cost of development justified?

(l) Was the EZI device actually installed at Williamson an advance in the art?

(m) Is the subject matter of any of the allowed claims of Serial No. 08/435,798 beyond the level of skill in the art as of May 1995?

47. With respect to question (a), I conclude that a variety of retractable coaters existed in the art as of mid-1994, readily adaptable to use anilox rollers and chambered doctors, and capable of being easily modified for so-called "interstation" or "use up front" as contemplated by the '363 patent. With respect to question (b), it is my considered opinion that, based on the facts disclosed in the two declarations of Baker and the information transmitted from Jesse Williamson and Bill Davis to Baker on June 12, 1994 and the facts disclosed in three declarations of Bird, all submitted to the U.S. Patent and Trademark Office in the prosecution of Serial No. 09/315,796, the reissue application to U.S. Patent 5,630,363, that one of ordinary skill in the art could have readily constructed a retractable printer/coater with an anilox roller and chambered doctor for interstation use in the summer or fall of 1994 without undue experimentation, and that the information given to Baker was sufficient to instruct the average person skilled in the art what to do to arrive at a device to perform the flexographic lithographic process of the '363 patent. With respect to question (c), I believe that the December drawings of PRI dated (1) 12/5/94 with respect to a linear auxiliary coater (e.g., production Nos. PRI00005, PRI01139-1140), or earlier, and (2) 12/30/94 (e.g., production Nos. PRI000006 or PRI01137) were insufficient to teach one of ordinary skill in the art the '363 process. Concerning question (d), for a multitude of reasons, I believe that the May 4, 1995 application of DeMoore, Serial No.

08/435,798 fails to adequately teach one of ordinary skill to perform the process. The answer to question (e) in my opinion is yes. According to their testimony (37 CFR § 1.131 Declaration Testimony) and the Testimony of Harry Bowyer, Davis and Williamson had at least three designs in mind to accomplish their process. They preferred use of an auxiliary, retractable flexo printer/coater with an anilox roller and a chambered doctor. The later declaration of Jesse Williamson is also pertinent. The answer to (f) is yes. Davis and Williamson had a workable design concept in 1992 of several devices to practice their process, including a retractable auxiliary unit having an anilox roller and chambered doctor. The answer to question (g) is no.

Claim 24 - 35 are method claims. Claim 24, at best, would have flexographic steps performed at each station. Claim 30 of the original application, the other independent claim, is directed to a process having only two lithographic units, and cannot be described as directed to that type of process which can fairly be described as a continuous in-line lithographic process. Moreover, the claim is inconsistent because it requires the same process sub-steps to be performed at each of the two stations. Claim 30 cannot be fairly characterized as Davis/Williamson's process. The answer to question (h) appears to be yes. At least claims 1 and 13 cover the device of Fig. 2 of the '363 patent. No blade or reservoir is shown in Fig. 2 of the '363 patent as is mentioned in

Claim 12. The answer to question (i) is no. The status of the claims of Serial No. 08/435,798 as of the summer of 2000 is given, as I understand, as Exhibit D hereto. Claims 24-35 stand withdrawn. Claims 6, 9, 18-19 and 21 are allowed and 1-5, 7, 8, 10-17, 20, 22 and 23 are rejected. There are no pending process claims. The answer to question (j) is yes. Claims 1 and 13, both of which stand rejected as being obvious, cover the device of Fig. 2. Claim 12 is also rejected, although as stated above, Fig. 2 does not show a blade or reservoir. I agree with the



examiner that the subject matter of Claims 1, 12 and 13 are obvious in view of Bird U.S. Patent No. 4,841,903, taken in view of Sarda, U.S. Patent No. 4,889,051. The statement made by applicants in their appeal brief (pg. 7, para. 2, lines 5-15) that Sarda "adds no ink" and "does not suggest the application of ink" to the blanket cylinder 3, is simply not true. Also, that "Sarda does not suggest or disclose the potential of a ferris movement inking/coating apparatus directly to the blanket cylinder in a tower to which the apparatus is mounted" is not true. (See claims 3-6 of Sarda which describe position to apply ink to the press blanket cylinder 3, Fig. 4 and the abstract of the Sarda patent). Applicants' statement, again, is not true pertaining to the rejection of Claim 17 (pg. 9, para. 4) regarding Sarda. The blanket cylinder is directly inked by Sarda's device, and it does maintain relatively constant orientation to the horizontal during movement.

I believe that other prior art could have been substituted for either of these two references. I note that none of claims 1, 12 or 13 have an anilox roller, chambered doctor, or [photopolymer] flexographic plate requirement(s), or even a requirement for laying down a flexographic ink or even a requirement that the ink to be applied has an aqueous base. The answer to question (k) is no. The development was unreasonable as to length of time and expense. Quite frankly, it was the work of an organization making an auxiliary "rack-back" apparently for the first time. No competent organization would have built an experimental cantilevered device such as PRI did for WPC at the end of February 1995 and used WPC as a guinea pig for simulations. The answer to (l) is no. Each of the EZI devices actually installed by PRI that I observed at WPC were not on par with the state of the art in auxiliary equipment manufacturing. The diameter of the anilox roll was too small. Second, the auxiliary mechanisms had no state of the art device to prevent bouncing. The retraction arms and coating head were made out of aluminum, which does not

provide sufficient strength and rigidity for this application. The wall thickness of the anilox roll was far too thin. The entire auxiliary device was flimsy. PRI's Steve Garner knew in 1995-1996 that the WPC device had bouncing problems and needed to be latched and locked, but Dahlgren, to the best of my knowledge, was never approached by PRI to obtain a license for Dahlgren's state of the art latch and lock technology. The answer to (m) is no. The few allowed claims 6, 9, 18-19 and 21 involve some "bells and whistles" (e.g., "power actuator", claim 6, 21; "stop member", claim 6,21; "clevis plate", claim 6, 21; "motor means", claim 9; "first cradle", claim 18; "carriage assembly" with a "pivoting inking coating apparatus", claim 19; and "bell crank", claim 21), all of which were old in the art and all of which would have been obvious for the person of ordinary skill to install on a basic device to perform the '363 process.

Several things also strike me. The length of time between the time agreed upon to make an interstation device – about February 11, 1995 (PRI 00134, W0004259) and the first installation sometime between late August 1995 (37 C.F.R. §1.131 Declaration), as maintained by WPC, and November 1995 (Complaint), as contended by PRI, is simply unreasonably long. Three months was sufficient -- five to six weeks in engineering and eight weeks in manufacturing would be sufficient. The device would have then been installed in a week or two weeks.

Moreover, the costs which PRI asserts that it spent on developing the device in 1995 – \$469,109.74 (DeMoore Exhibit 17, PRI 00345) – is unreasonably high, indicating to me that they want now to be reimbursed for their research and development, engineering, administrative and capital costs in entering the auxiliary "rack-back" field. Dahlgren in 1995 would have sold three units to WPC for a maximum of about \$75,000 each -- all delivered and installed at that price, fully guaranteed to run at press speeds. We would have made a reasonable profit. PRI, in fact,

priced their unit at \$62,084 in February 1995 (W00426). DeMoore's Exhibit 17, with a rough estimate of costs supposedly attributable to development of the EZI, does not comply with industry standards concerning allocation of labor costs for employees. There is no information provided, employee by employee, for each work order number on a number by number basis, let alone day-by-day. Furthermore, I understand, based on Jesse Williamson's testimony, that no manuals were provided to WPC with the EZIs. This was a deficiency of PRI's because it is common practice in the printing equipment industry to furnish operations manuals with the equipment providing instructions on installation, adjustment, operation and maintenance of the equipment.

There is no indication in the testimony of Rendleman or DeMoore that PRI ever approached Dahlgren for a patent license to anything. I know from personal knowledge from speaking to Steve Garner at the time that PRI feared Dahlgren's patent coverage concerning critical aspects of its "rack-back" coaters and I believe that the reason for PRI having gone in the "ferris wheel" direction was not out of design creativity, but out of fear of confronting so-called patent problems with Dahlgren. In reading the DeMoore and Rendleman depositions, I walk away from them with the notion that their testimony is such that the "ferris wheel" approach was selected due to vertical space limitations. Yet I find no testimony whatsoever on the part of DeMoore and Rendleman that ceiling height was ever given as a mandatory constraint. Most importantly, I find no evidence that DeMoore, Rendleman or anyone else at PRI ever counseled the client as to the best approach to work Davis' and Williamson's contemplated retractable design so as to minimize costs, time of installation and workability of the device at normal press speeds. In my opinion, from the DeMoore and Rendleman testimony and from PRI's drawings

(Bucket "A"), PRI was driven to select a cantilevered mechanism in order to try to secure patent rights and avoid possibly conflicting patents, rather than select the best design for the job. The "ferris wheel" "F" concept, however, is old, and is simply not the best, for a variety of engineering reasons. Unless adequately latched and locked, it is prone to have "bouncing" and to cause a decrease in productivity. A type "I" or "V" or "H", or a combination thereof, have been long proven to be the best.

48. In reaching the conclusions set forth herein, I have reviewed:

| <u>Bucket</u> | <u>Descriptions</u>                                                                                                                                                                                                                                                                                                                                                        | <u>Bates Nos.</u>                     |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| A             | PRI's Drawings;                                                                                                                                                                                                                                                                                                                                                            | See Exhibit G                         |
| B             | U.S. Patent No. 5,370,976 to Williamson, et al.; U.S. Patent No. 5,630,363 to Davis, et al.;                                                                                                                                                                                                                                                                               | PRI01055-PRI01062,<br>W000010-W000017 |
| C             | U.S. Patent No. 5,638,752 to Hartung, et al. and 5,476,042 to Ehrhard et al.;                                                                                                                                                                                                                                                                                              | W012899-W012913                       |
| D             | Declarations - master List (all declarations submitted in reissue application, including those of reissue applicants and Ray Prince, and third party witnesses Baker, Bird, Garner and Brown, etc.);                                                                                                                                                                       | W012914-W013389                       |
| E             | Paper submitted October 13, 2000 to PTO entitled REISSUE APPLICANTS FIRST SUBMISSION OF DEPOSITION TESTIMONY AND SUBMISSION OF SUPPLEMENTAL DECLARATION, including Depositions of Baker, Bird, Brown and Garner and exhibits and recent (October 5, 2000) Supplemental Declarations of Baker and Bird; and recently submitted expert reports of Pravel and Professor Mott; | W013390-W014323                       |
| F             | Pleadings by the parties in this case, including proposed counterclaims of Defendants;                                                                                                                                                                                                                                                                                     | W014325-W014398                       |
| G             | Plaintiffs' and Defendants' responses to interrogatories, requests for admissions and document requests;                                                                                                                                                                                                                                                                   | W014399-W014496                       |
| H             | The expert reports of Pravel and Professor Mott as tabbed in "E" above;                                                                                                                                                                                                                                                                                                    | W014497-W014526                       |

| <u>Bucket</u> | <u>Descriptions</u>                                                                                                                                                                                         | <u>Bates Nos.</u>                                           |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|
| I             | Various copies of Serial No. 08/435,798, as filed May 5, 1995 and a counterpart EP0741025(A3);                                                                                                              | W01349-W01409;<br>W014527-W014595                           |
| J             | U.S. Patent No. 5,598,777, U.S. Patent No. 5,651,777, U.S. Patent No. 5,960,713 (Ray Prince studied this in detail and testified about the '713 in the PTO); U.S. Patent No. 6,116,158;                     | W014596-W014699                                             |
| K             | Original Reissue Application as filed 5-20-99, including original cut-up specification and proposed claims;                                                                                                 | W014701-W014768                                             |
| L             | PTO Protest of DeMoore, et al., in PTO reissue, September 1999;                                                                                                                                             | W014769-W014771                                             |
| M             | First Office Action in PTO reissue mailed February 9, 2000;                                                                                                                                                 | W014772-W014786                                             |
| N             | Amended and Cut-up Specification and Reissue Applicants' Position on Patentability with Attached Declarations of Baker, Bird, Brown, Bird supplement, and Garner filed April 7, 2000;                       | W014787-W015270                                             |
| O             | Supplemental amendment filed July 7, 2000 in the reissue application;                                                                                                                                       | W015271-W015475                                             |
| P             | First supplemental statement of prior art and other information filed May 20, 1999 (original set of prior art);                                                                                             | W015476-W015801                                             |
| Q             | Second supplemental statement of prior art and other information filed July 17, 2000 (art not previously included and mentioned in Item "N" above and abroad and in Serial No. 08/435,798;                  | W015802-W016603                                             |
| R             | Third supplemental statement of prior art and other information filed September 26, 2000 (the Hartung, et al. patent Item "C" above and Declaration including Ray Prince's Third Supplemental Declaration); | W016604-W016616                                             |
| S             | Fourth supplemental statement of prior art and other information filed September 29, 2000 (including Canadian brochure and Ray Prince's Fourth Supplemental Declaration);                                   | W016617-W017040                                             |
| T             | Deposition of Bill Davis (not concluded);                                                                                                                                                                   | W017041-W017230 and<br>exhibits of other<br>numbered series |

| <u>Bucket</u> | <u>Descriptions</u>                                                                                                                                                                  | <u>Bates Nos.</u>                                     |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|
| U             | Deposition of Ron Rendleman (not concluded);                                                                                                                                         | W017231-W017552 and exhibits of other numbered series |
| V             | Deposition of Jesse Williamson (not concluded);                                                                                                                                      | W017553-W017775 and exhibits of other numbered series |
| W             | Deposition of Howard DeMoore (not concluded);                                                                                                                                        | W017776-W018097 and exhibits of other numbered series |
| X             | File History EP 620,115 (counterpart to U.S. Patent 5,638,752) and English translations of European applications; KVA Opposition and decision and prior art K1-K7 cited by Opponents | W018098-W018865                                       |
| Y             | Prior Art to Exhibit 2                                                                                                                                                               | W018867-W019721                                       |
| Z             | Selected portions of File History, U.S. Patent 5,960,713                                                                                                                             | W02038-W02663                                         |
| AA            | File History, Serial No. 08/435,798                                                                                                                                                  | W01670-W02034                                         |

### III. ANALYSIS

49. I have prepared a set of drawings, copies of which are attached as Exhibit E, showing conceptually prior art retractable and manual coating devices adapted for interstation use.

50. Had I been given the task of constructing a retractable coater to meet in June, 1994 the Williamson-Davis design criteria indicated in the Baker ((a) W013251-13255 and (b) W013256-W013262) and Bird ((a) W000876-W000879, W013166-W013190, (b) W013193, and (c) W013246) declarations submitted to the U.S. Patent and Trademark Office and the deposition testimony of Davis and Williamson, I would have preferred an inclined version

(Type "I"). This design, in my opinion, avoids the potential problem of "bumping" and streaking inherent in the ferris wheel concept, even at low and especially at high press speeds.

51. To the best of my knowledge, PRI was to all practical purposes a novice with respect to the design and construction of coater devices in mid-1994. The "EZ" coater was a commercial failure, as virtually admitted by DeMoore in his deposition, and the "EZB" coater obtained from Bird was designed and manufactured outside of PRI.

52. Based on the deposition testimony and/or declarations of Jesse Williamson ((a) W012997-W013047 and (b) W013263-W013286), Bill Davis (W012997-W013047), Gary Doughty (W013312-W013328) and Harry Bowyer (W013287-W013311), it is clear to me that Bill Davis and Jesse Williamson had a workable conception of the process of the '363 upon Williamson's return from Germany in late May, 1992.

53. Once an indication was given to one in the auxiliary printing equipment business, such as to Baker of PRI on June 12, 1994, that an interstation, retractable printer/coater was desired having an anilox roller and chambered doctor, little other instruction was necessary. The information provided by Davis and Williamson starting in August 1994 (see Bird Supp. Decl., W013193-W013245, ¶¶ 3-4 at W013194) related primarily to the process and was not essential to make the equipment requested. Having studied the prior art -- including that mentioned in the various submissions by Davis and Williamson to the Patent and Trademark Office (buckets P and Q), the submissions in Serial No. 08/435,798 (file history Tab AA) and the other known art (bucket Z), in my opinion, the process approach of Davis and Williamson was revolutionary in the mid-1990s. I have personally seen the results of this approach, and they are spectacular. A continuous in-line process, if executed well, maximizes speed and minimizes cost, also.

54. The drawings of PRI in December 1994 (note bucket "A") taken alone do not teach one of ordinary skill the Davis/Williamson flexo-litho process, much less the advantages.

55. Application Serial No. 08/435,798 filed May 4, 1995 (bucket "I", or W01349-W01412 or W014527-14579) did not at that time enable one of ordinary skill in the art to make a workable device consistent with its teachings, let alone enable the '363 process. The substance of the earlier WIMS '976 patent is not taught or incorporated by reference. With respect to the "ferris wheel" device, no adequate teaching is included of how a "resilient" anilox roller is made - something that I understand in the '713 prosecution lead to a first office action rejection, if not a October 28, 1997 final rejection on claims having that term in Serial No. 08/538,422 leading to U.S. Patent 5,960,713 (W014641-W014669), for which, DeMoore had to amend his specification (col. 16, lines 17-41 of the '713 patent W014665), in August, 1998 to cure. From one of my own patent applications filed in 1996, I know as a practical matter that one of ordinary skill in the art did not know what that term meant in 1995. Most importantly, the teaching of interchangeability of a "resilient" anilox roller and a standard anilox roller for interchangeable printing or coating on p. 13 (W0013690 - W014542), lines 14-17 of Serial No. 08/435,798, is inoperable (standard anilox roller could not properly engage the plate and one could not properly "coat" from the plate cylinder). One cannot interchange a steel anilox roller with a "resilient" anilox roller for engaging a thin, relatively hard plate on a plate cylinder. The dual head, "double bump" concept alluded to in Fig. 6 (missing from Serial No. 08/435,798 as filed, but present in EP 741,025 A3 (W014590-14595)) is, as described in Serial No. 08/435,798, in my opinion, unworkable.

56. The teaching of the '363 patent incorporating by reference WIMS '976, together with Fig. 2, is adequate to teach an interstation device and the '363 process. In a nutshell, the



concept of Davis and Williamson as described in their conversation to Bowyer in October 1992 in Dallas and as conveyed to Baker of PRI in June 1994 and to Bird of PRI starting in August 1994 encompasses the retractable flexographic coater as shown in Fig. 2 of the '363 patent.

57. I have also been asked if the claims of U.S. Patent 5,960,713 (W014667-W014669) or any of them are taught in Serial No. 08/435,798. The answer is no -- clearly no. The concepts of a retractable auxiliary unit, i.e., "ferris wheel", and a dedicated station are different. The figures are different. The only thing that ever could have been in common was the "double bump" concept, but Serial No. 08/435,798 did not teach adequately what a resilient anilox roller was, and Fig. 6 was omitted in Serial No. 08/435,798 as filed, but included in the European counterpart.

58. Reading the deposition testimony of Davis, Rendleman, Williamson and DeMoore, it is clear that the first EZI devices made by PRI were made for Williamson. There is no testimony in the depositions that PRI ever promoted the "dual cradle" or "double bump" technology to WPC. The fact that none of these were promoted or built with the "dual cradle" arrangement for WPC speaks volumes to me. If PRI was in command of a workable "double bump" technology, they would have wanted to install it at WPC, and use WPC for advertising purposes.

59. The opinions given herein are based solely on the testimony and other documents in paragraph 12 above, and the undersigned reserves the right to change, to alter, or to enhance his testimony upon the review of additional testimony or other documents.

60. I have reviewed among other depositions, the first part of Rendleman's deposition. There are inaccuracies in Rendleman's Testimony as follows:

- (a) Rendleman did not work for me at Dahlgren.

(b) Rendleman knew our coater retracted more than 1". It actuated "on/off" to blanket 1" but retracted as much as 1 to 3 feet horizontally.

(c) Rendleman didn't design an inker for Dahlgren except for a single R&D project on a perfecting press which never materialized into a production (saleable) item.

(d) Except for the press project (c) above, Rendleman was in manufacturing, maintenance and assembly areas during his Dahlgren tenure.

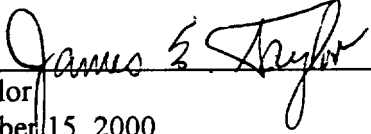
(e) Rendleman had to know about the DiRico patented coater and the DiRico, et al. patented coater retractable mechanisms before Rendleman left Dahlgren.

#### IV. OTHER ITEMS

61. This is the first time I have testified as an expert in a printing case. I am recently retired from Dahlgren. I have one publication: "Cost and Quality, A Dampener Dilemma?", attached hereto as Exhibit F. There are twelve patents issued by the U.S. Patent and Trademark Office on which I am the inventor or coinventor:

|     | <u>Patent Number</u> | <u>Name</u>                                     |
|-----|----------------------|-------------------------------------------------|
| (a) | 4,373,442            | Portable Ink Fountain                           |
| (b) | 4,442,139            | Dampering Fluid Evaporator & Method             |
| (c) | 4,444,147            | Coating Apparatus                               |
| (d) | 4,453,463            | Inking Systems                                  |
| (e) | 4,527,471            | Dampering Fluid Removal Device                  |
| (f) | 4,527,479            | Ink Removal Circulating & Distribution System   |
| (g) | 4,532,735            | Variable Angle Extruder Blade Surfacing Machine |
| (h) | 4,533,563            | Coating Method                                  |

- |     |           |                                                                  |
|-----|-----------|------------------------------------------------------------------|
| (i) | 4,934,305 | Retractable Coater Assembly Including a Coating Blanket Cylinder |
| (j) | 5,178,678 | Retractable Coater Assembly Including a Coating Blanket Cylinder |
| (k) | 5,797,318 | Liquid Applicator for Cut Sheets                                 |
| (l) | 5,908,505 | High Volume Textured Liquid Transfer Surface (abstract attached) |


  
\_\_\_\_\_  
James E. Taylor  
Date: November 15, 2000

**CERTIFICATE OF SERVICE**

I hereby certify that the foregoing Expert Report of James E. Taylor Under Federal Rule 26(a)(2)(b) was served on Plaintiffs' counsel by placing a true and correct copy thereof in the United States Mail, postage prepaid, on the 17<sup>th</sup> day of November, 2000, addressed as follows:

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